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THE EFFECTS OF TELEVISION ON CHILDREN AND ADOLESCENTS. AN ANNOTATED BIBLIOGRAPHY WITH AN OVERVIEW OF RESEARCH RESULTS. REPORTS AND PAPERS ON MASS COMMUNICATION.
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The effects of television on children and adolescents

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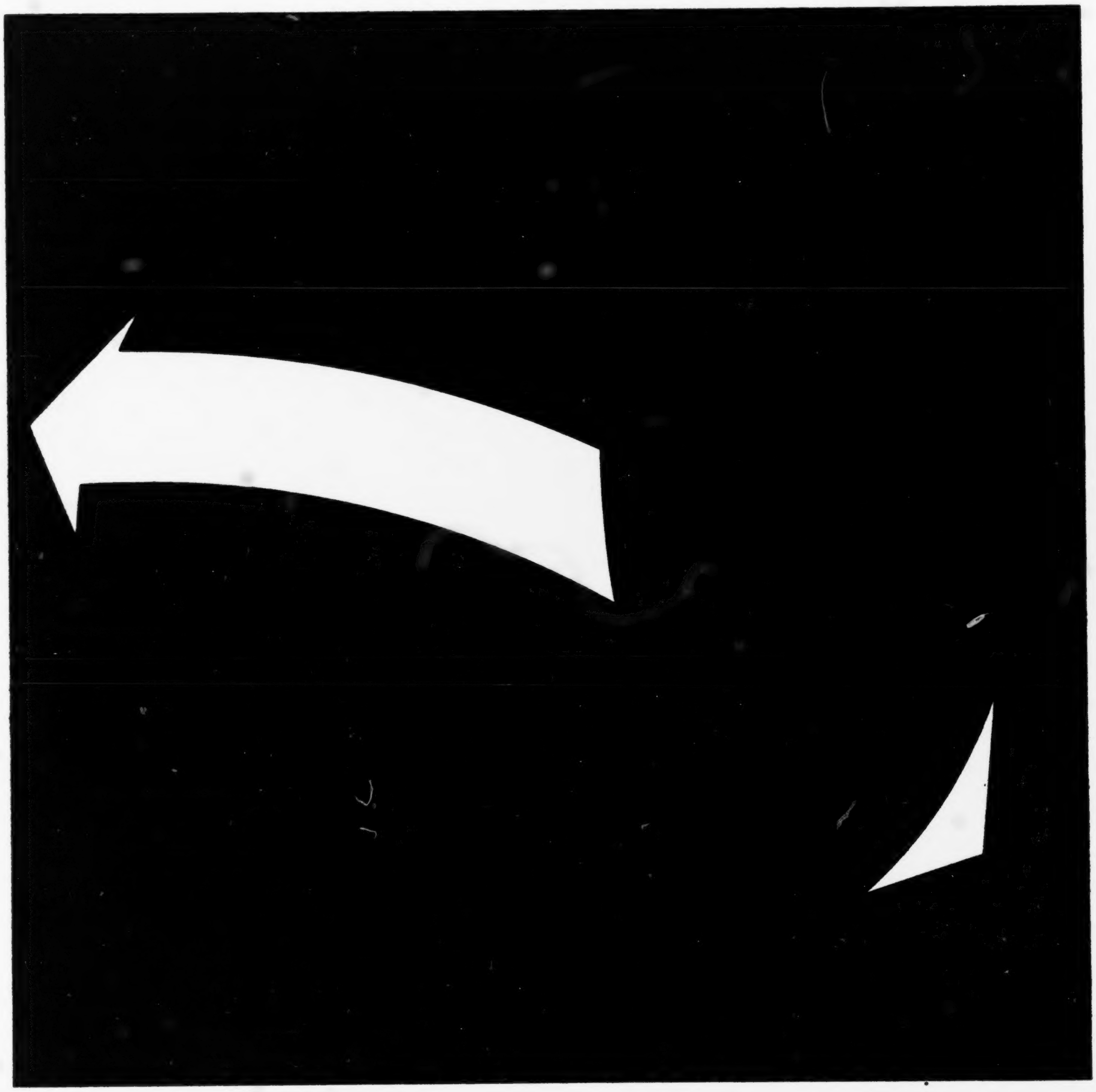

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The effects of television on children and adolescents

An annotated bibliography
with an introductory overview
of research results

Prepared by
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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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PREFACE

Following the publication by Unesco, in 1961, of an annotated international bibliography on "The Influence of the Cinema on Children and Adolescents" (Series: Reports and Papers on Mass Communication, No. 31), it was decided to produce a companion volume dealing with television.

It was felt that the preparation of this bibliography might appropriately be undertaken by the International Association for Mass Communication Research, and accordingly Unesco made a contract with that international non-governmental organization for this work. In turn, the IAMCR placed responsibility for editing the bibliography with one of its members, Dr. Wilbur Schramm.

Attention should perhaps be drawn here to the Foreword, which sets out the criteria under which, as agreed with IAMCR, items were selected. In particular, this bibliography aims at restricting itself to articles on behavioural research, that is to say publications in which the conclusions are based on experiment, survey or clinical study dealing with human behaviour. This is a narrower basis of choice than was used in the earlier bibliography on the cinema, since it is intended to exclude commentaries, however excellent, which derive from personal opinion rather than from scientific evidence.

No bibliography dealing with such a rapidly-developing medium as television can pretend to be exhaustive or definitive; but it is hoped that, despite any limitations in this respect, the present publication will serve not merely to provide useful information but will also stimulate others to supply relevant material which may be of use should an edition at a later date be found necessary.

Finally, it is pointed out that Dr. Schramm and the International Association for Mass Communication Research were responsible for the selection and presentation of the material in this publication and that any opinions expressed are those of the IAMCR and its editor, and not necessarily those of Unesco.

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FOREWORD

The bibliography which follows is intended to represent all the significant behavioural research dealing with the effect of television on children.

We have defined behavioural research as experiment, survey, or clinical study dealing with human behaviour. Therefore, we have not included articles of criticism and commentary not based on research. Many of the critical articles, of course, are rich in wisdom and insight. But in the last decade a phenomenal number of persons have set down on paper their thoughts on television; and to separate out the wise and insightful statements from the others would require a set of personal judgements that would inevitably be questioned and could not easily be defended. On the other hand, there is little difference of opinion about the standards of scientific investigation. By requiring that an article or a book reflect at least elementary standards of scientific research we have been able to separate out the kind of knowledge about television's effect on children which has been gathered and analysed systematically, which should be verifiable by replication, and which has been described so fully and accurately that we can judge whether it is possible to generalize and where.

Even in making a selection of the research, however, it was necessary to make at least one personal judgement; whether the article was significant or trivial. Some of the work which was, by our definition, research, was hardly worth presenting in a bibliography of this kind. For example, a student's survey of the attitudes toward television of one fourth-grade class in a school in the American Middle West may be a useful exercise for the student but is of little interest or importance elsewhere in the United States, and still less in other countries of the world. Fortunately, there have been relatively few such articles in print, and in deciding what is trivial, what is significant, we have tried to err rather on the side of including too much than of excluding too much.

We have tried to find and represent all the significant research on the topic, but undoubtedly we have missed some. If so, this is a matter of great regret to us, and a deficiency which we hope will be taken care of in later printings. We have done as much as possible within time and budgetary limitations to have competent scholars search the scholarly literature of every nation which has had experience with television. In the case of some languages, however, it has not been possible for us to read the original publications ourselves, and there may have been incomplete understanding between us and the scholar who did read it. There may even have been some misunderstanding as to the kind of material to be included. It is a difficult undertaking, of course, to make an international bibliography, and a much more difficult one to make an international annotated bibliography which will be complete and accurate. We therefore solicit corrections and additions from scholars in all countries who feel that such should be made.

The reader may wonder why we have included a number of film studies in this television bibliography. We have done so because we considered them pertinent. The experience of viewing television, of course, differs from that of viewing films in the immediacy and timeliness of the experience, and in the fact that it usually takes place in the home rather than the theatre, and alone or in a small group rather than in a large audience. But on the other hand there are more likenesses than differences between the two experiences. They both appeal to the visual and auditory senses; they both display movement; much of the content of entertainment films is like that of entertainment television, and educational films cover the same ground as educational television; and in fact the experiences tend to merge - as, for example, when movies or filmed programmes are seen on television, and when films are used, as they very often are, for "television" research. It seems to us, therefore, that any summary of present knowledge of the effect of television must take account of what has been learned, in the last several decades, about the effect of films. Accordingly, we have included some of the chief film studies and also a few studies of other media for comparison with television.

Finally, we have tried to represent research series by the last or summary publications, rather than by listing every separate publication. Thus, for example, rather than listing each of the annual reports of Professor Paul Witty on his television panel, we have listed the most recent report which summarized the earlier ones.

It is not feasible to try to name all the individuals who have been helpful in gathering these titles, but we should like to name a few: Professor Fernand Terrou of the University of Paris, under whose care, as Secretary-General of the International Association for Mass Communication Research, the project began, and Professor Maarten Rooy, of the University of Amsterdam, under whom, as present Secretary-General of the IAMCR the project was completed; the Centre Audio-Visuel of the Ecole Normale Supérieure, at St. Cloud, and especially

Mr. Tardy, who made the annotations of French scholarship in television; Professor M. Kafel, of the University of Warsaw, who was responsible for listing research in Poland, the Soviet Union, the German Democratic Republic and Czechoslovakia; Mr. Takeo Furu, of the Radio and Television Culture Research Institute of the Japan Broadcasting Company, and Mr. Takeaki Naito, a graduate student at Stanford University, who directed us to the Japanese publications; Dr. Hilde Himmelweit, of the London School of Economics, whose volume Television and the Child, and the included bibliography, has put all television scholars in her debt; Dr. G. Lanius, of the Institut für Film und Bild at Munich; Dr. Gerhardt Maletzke, of the Hans Bredow Institut, University of Hamburg; the authors of the Unesco bibliography on the effect of films on children, who saved us much time in seeking out the relevant film studies; and, most of all, my colleagues in the writing of Television in the Lives of Our Children. Professor Jack Lyle of the University of California, and Professor Edwin Parker, of Stanford, who collaborated with me in the preparation of the earlier bibliography which was of great assistance in preparing the present work.

WHAT THE RESEARCH SAYS - A BRIEF OVERVIEW

THE PRESENT STATE OF RESEARCH

Research on the effects of television was preceded by two decades of research on the effects of a very similar medium, film. Before the first television studies appeared, at the end of the 1940's, there were already several hundred studies of motion pictures. Among these were the important series financed by the Payne Fund at the beginning of the 1930's, and a number of studies on learning from instructional films. It is safe to say that almost every important question raised by television research - addiction, effect on leisure time, contribution to knowledge, effect of violence, relation to crime and delinquency, effect on mental adjustment, and so forth - was previously raised and considered in connexion with the movies. Thus television research began with a number of its chief questions pre-stated, tentative hypotheses ready for testing, and some useful experience with methodology.

When television has come into a country, however, it has usually gone through the whole media research cycle. The first studies of its effects on children have usually been descriptions of viewing behaviour: how much time do children spend on television? at what hours do they view? what programmes? The second question asked is the effect of television on leisure time: what does it do to children's playtime? their time at home? their study time? their reading time? their use of radio and movies? Third in order, typically, follow questions about their reactions to television: what programmes do they like? what content do they believe? what frightens or amuses them? Finally, research faces up to the really hard questions of television's effect on values, knowledge, physical and mental health, and social behaviour.

The first three of these levels of research have been dealt with in a number of countries and cultures. Making allowance for cultural differences, and for different kinds and amounts of television available, we can predict with some confidence what children's viewing patterns are likely to be when television becomes available, what changes television is likely to make in their schedules of leisure time, and what reactions to television they are likely to have. Concerning questions on the fourth level, however, we are much less sure. We have no reason to think that television has an undesirable effect on health, or that it is a sole and sufficient cause of asocial behaviour like delinquency or crime. But television's relationship as a contributory cause to asocial behaviour, its contribution to values and knowledge, its interaction with maladjustment and mental illness - all these are immensely complicated matters and far from completely understood.

Four large survey studies published in the last few years - two in Europe, one in North America, one in Asia - sum up and illustrate the present state of research in this field. These studies are by Himmelweit, Oppenheim, and Vince (10),* Maletzke (11), Schramm, Lyle, and Parker (12), and Furu and others (9). Each of these provided quite conclusive evidence concerning the television behaviour, the effect of television on leisure time patterns, and the reactions to television, of large and representative samples of children. By reviewing other research, by comparing children with television to children without television, and by extrapolating from survey data, they also gave some answers to the hard questions of effect. Yet in this latter field - effect on knowledge, values, physical and mental health, and social behaviour - their answers were less confident than in matters of television behaviour, leisure time effects, and reactions. These studies have gone about as far as it is possible to go with survey methods toward understanding the effects of television on children. To go farther it will be necessary to make more use of experimental and clinical methods, preferably continued over a considerable time span. There is a promising line of experimentation concentrating chiefly on the relation of television to aggression (Maccoby, Siegel, Bandura, Lovaas, Berkowitz, and others in the United States; Emery, Thompson, and others in Australia - see Section VI-A), but surprisingly little clinical evidence is to be found in the literature.

Even a great deal of additional research, however, would not necessarily answer these more difficult questions of effect with the same sureness that we expect in answers to questions about the physical world. It may be helpful to explain why this is the case.

WHY THESE EFFECTS ARE HARD TO STUDY

Effects are harder to study in humans than in things, for one reason because we are unable or unwilling to experiment on humans as we do on things. What we do to a gramme of iron, a beaker of hydrochloric acid, or a 3,000 kilocycle radio wave, is not restrained by any worry that we might cause it pain, damage its personality, teach it a bad habit, or shame it before its peer group. Yet these considerations are constantly before us when we experiment with children. For example, our ethics forbid us to find out whether television produces delinquency by the obvious experimental method of trying to produce delinquency by means of television. Thus many illuminating but severe experiments are ethically out of bounds when we deal with humans, and particularly with young humans for whose welfare we feel a special responsibility.

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* Numbers in parentheses refer to numbered titles in the bibliography that follows.

Furthermore, these effects which we are so greatly restricted in studying are extremely complex ones. A child responds to a television programme with his whole life. The television stimulus enters into a nervous system where many years of learned responses determine how the new stimulus will be perceived and what shall be done about it. In turn the new stimulus, if accepted, may contribute to that storehouse and have something to do with a later response to an entirely different stimulus. The response to any television will be influenced to some extent by the group relationships of the respondent. In other words, any of the child's complex behaviour is likely to have a complex cause, and it is extremely hard to decide what part any single television programme played in causing it. This is particularly important because the effects of a continuing stimulus like television may be cumulative. What seems to have no effect today may contribute to an effect many days from now, just as countless drops of calcareous water falling, during many years, from the roof of a cave build a huge stalagmite. Because the causes are complex, we are likely to overestimate the effect of the television programme that seems related to them; because the effects are cumulative and often remote, we may underestimate the effect of a television programme that seems harmless.

No parent, teacher, or communication researcher needs to be told that there are often great differences between the responses of different children to the same programme. A child responds with all its related experience and the whole of its individual personality. The chemical in the test tube waits passively for the experimental substance to be added, but the child comes actively to television, seeking, selecting, disposing, reacting. What the child brings to television is therefore as important as what television brings to the child. It is a complex interaction.

A researcher, in deciding how to study these complicated and obscure relationships between cause and effect, has to make a cruel choice. If he wants a controlled and "clean" experiment he can set up a laboratory situation in which for a limited time he can control the experiences of two groups of children. By designing the experiment so that one group has all the experiences of the other save one, it is possible to observe the different behaviours of the two groups and ascribe the differences, with some confidence, to the unique experience. But in the laboratory he can control only a fragment of life. He can do very little with cumulative effects. He must be very cautious and conservative in specifying the conditions under which the effects he has seen in the laboratory will be seen in life outside the laboratory. On the other hand, if he experiments in a life situation, then he has less control over his experiment. He may be working, as it were, with a contaminated test tube, or with hidden conditions.

None of these problems is unique to television; the situation is common to studies of many kinds of human behaviour. Yet the difficulties are sufficient to warn us not to expect too much, too soon, and too specifically, from research on the effects of television.

WHY CHILDREN WATCH TELEVISION

What is the appeal of television to children? For one thing, of course, it is popular because it is near at hand and easy to use. When the researcher digs into the psychological reasons beyond easy availability, he generally comes to about the same conclusion as Keilhacker on film (45), that the chief reasons for going to the cinema are, first, the desire to escape from everyday life, and second, the desire to get to know real life better. In similar vein, Himmelweit et al (10, conclude that television's appeal for children consists of giving them a chance to be "in the know... going behind the scenes ... learning about the world and about people. On the emotional side, television ... offers security and reassurance through the familiar format and themes of many of its programmes, notably the family serials and the Westerns. It offers constant change, excitement, and suspense. It provides escape from everyday demands with lightheartedness, glamour, and romance, and permits the child to identify himself with different romantic heroes". (p. 15)

Schramm et al (12) likewise conclude that there are two main classes of reason: "first, the obvious reason: the passive pleasure of being entertained, living a fantasy, taking part vicariously in thrill play, identifying with exciting and attractive people, getting away from real-life problems, and escaping real-life boredom - in other words, all the gratifications that come from having a superlative means of entertainment in one's living room, at one's command ... But there is, nevertheless, a significant component of information which children also get, usually without seeking, from television ... The girls say they learn something about how to wear their hair, how to walk and speak, how to choose garments for a tall or a short or a plump girl, by observing the well-groomed creatures on TV. They learn some details of manners and customs ... Some of the boys say they learn how young men dress in California or New York. Some of them say they learn a lot by watching the good athletes ... Children will say of television: 'The news is more real when you see where it happens,'" (p. 57-58).

These same authors (12) suggest a subsidiary appeal of television - its social utility. "For example, teenagers find that television is a useful tool in providing an excuse for boys and girls to enjoy each other's company, or furnishing something to do on dates ... The previous evening's television programmes provide an excellent common ground of shared experiences for conversations ... This social use of television is not essentially different from social use of an automobile or any other instrument that bulks large in a child's world."(p. 59)

Writing on "Why Do Children Watch Television?" (91), Maccoby points out that when we say television is interesting to a child, we make a statement not only about the programme but also about the viewer: "If it is interesting, it strikes a responsive chord in him - satisfies a particular need, supplies wanted information, or perhaps offers release from general tension." (p. 240) She then turns to describing the different functions of fantasy for different individuals. This has been the trend of many psychological approaches to children's viewing - trying to puzzle out the interaction between different kinds of television and different kinds of children, trying to understand what it is in the personality, group relations, and stored experiences of the child that makes him seek one kind of experience rather than another, from television. There is no opportunity in this brief introduction to go into these analyses, but references to them will be found in the bibliography itself.

TELEVISION'S EFFECT ON A CHILD'S LEISURE TIME

About one thing the research leaves us in no doubt whatsoever: when children have television available, they make a phenomenal amount of use of it.

Estimates from a number of countries cited in the following bibliography indicate that the average child of elementary school and high school age (6 to 16) devotes to television from 12 to 24 hours a week. The studies also indicate that elementary schoolchildren spend, on the average, a little more time viewing than do high school students.

In the United States, where the most extensive measurements of viewing by children of different ages have been made, (12) it is estimated that a child of 3 is already averaging about 45 minutes a day on television. By the time the child is in the first grade (age 5 or 6), he is spending about two hours a day in front of the television set. The amount of time spent slowly increases with age and with later bedtimes, until a peak is reached at age 12 or 13 when the average child is viewing about three hours a day. During the high school years (13 to 16), the viewing time again decreases to about 2 hours a day. This curve is consistent with other evidence on the subject, and the daily averages are not unlike those found in England or Japan. In England, the Himmelweit, Oppenheim, Vince study (10) found that children 10-11 and 13-14 years old averaged about 1.9 hours a day, which is a little less than the American average for those ages. This may be because less television and fewer station choices are available in England. Maletzke (11) found that German youth, 15 to 20 years old, averaged only 7 to 8 hours a week, or barely over an hour a day. It is not known whether this is a result of less television being available in Germany, of the age-group selected, or of a real difference in television's attractiveness to young people of different countries.

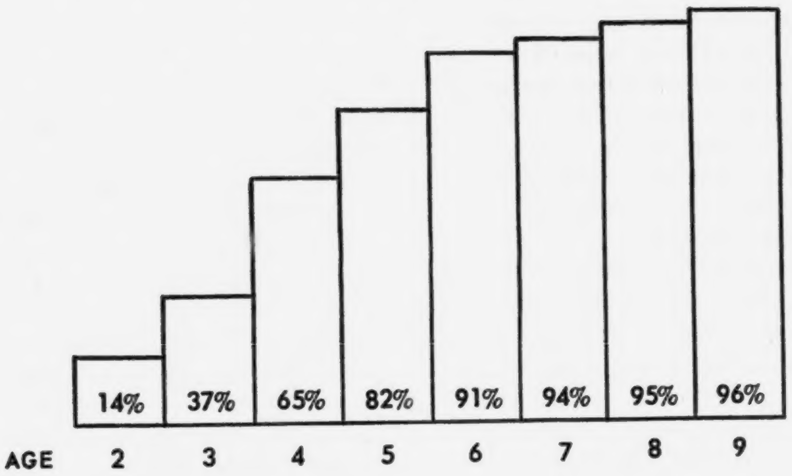
Wherever television becomes available for a number of hours a day, it dominates the leisure time of children. Himmelweit, Oppenheim, and Vince have suggested several principles that help to explain the changes television brings about in leisure patterns. The activities most readily sacrificed are those which satisfy the same needs as television, but less effectively. For example, younger children will go less often to the cinema when they have television in their homes; they will read fewer comic books, and read less magazine fiction; they will spend less time on radio. These activities meet about the same needs as television. But on the other hand, the reading of newspapers and non-fiction books will hardly be affected by television, because these activities answer different needs than does television. Similarly, the adolescent's movie-going will be less affected than will the younger child's, because for the adolescent the movies represent a valued social experience, whereas for the younger child they represent television in a theatre. For children, especially adolescents, radio comes to have a different function after television comes into use; instead of a comedy, drama, variety source, it tends to become a source of popular music. And, finally, the marginal and unorganized activities are more likely to be replaced by television than are the organized ones, until, as Dr. Himmelweit says, there is "a consequent reduction of leisure itself as children's lives inevitably become more crowded". These are the three principles - that when television comes in, functionally similar activities will be replaced, whereas functionally different ones will not; that certain activities (for example, radio listening) will be transformed in function; and that marginal or unorganized activities will be replaced before purposive and organized ones.

Children's bedtime tends to be slightly later in television homes (17 minutes in Japan, 11 in Canada) (9, 12). In Japan, homework time was found to be reduced about 14 minutes an evening when television came in; Canada found a slight, but not significant, difference in homework time. In Canada, the children in a television town spent significantly less time playing than did the children in a comparable town without television. In England and Japan, however, no significant decrease was noted in time devoted to social activity (10, 9).

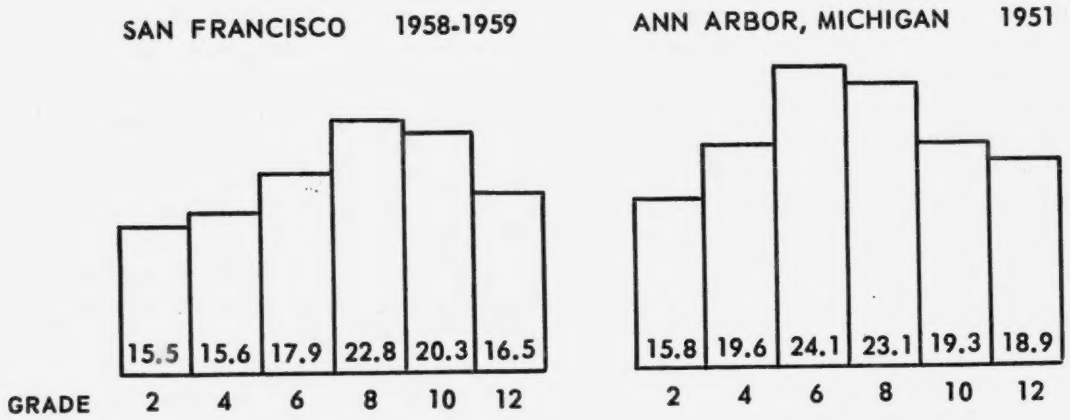
But the impressive figure that emerges from the

A NORTH AMERICAN CHILD'S TELEVISION TIME

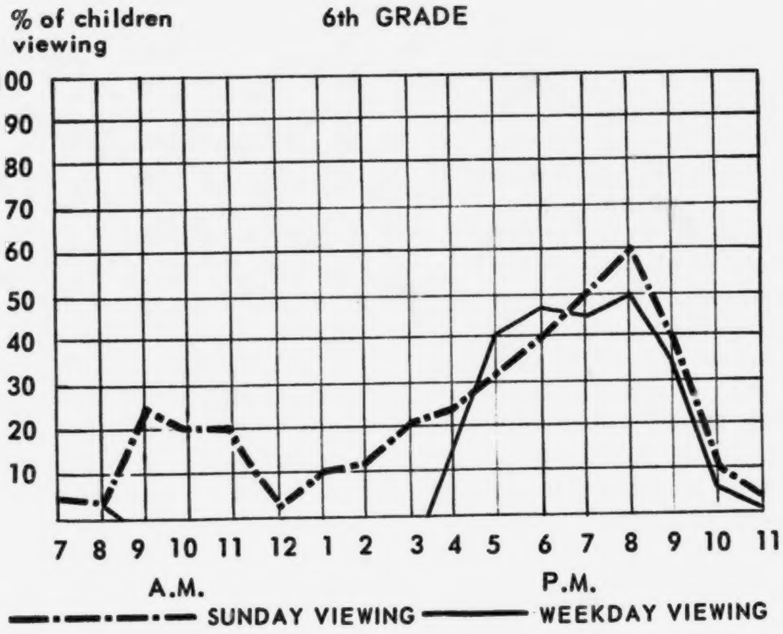
(Data from 12)



The beginnings of television use ; percentage of children using it at different ages.



Average hours of television viewing per child per week in two cities, by grade in school.



Typical patterns of children's viewing by hour of the day.

studies of television and leisure time is the enormous amount of time devoted to the medium during childhood. An average child 6 to 16 years old in any of the countries where more than a few hours of television is available and where children's viewing time has been measured in detail, can be counted on to spend between 500 and 1,000 hours a year, in front of the picture tube. This is a total of 6,000 to 12,000 hours during the 12 school years. The larger of these figures is not far different from the amount of time an average child spends in school during those same years, taking into account vacations and holidays.

EFFECT ON TASTE

Because children spend so much time on television, chiefly on programmes not noted for their cultural content, critics have wondered whether television "demeans" children's taste for entertainment. The research does not deal in value terms like "demean", but it nevertheless has some interesting things to say about taste.

When children begin at an early age to watch television, they usually begin with children's programmes - puppets, animals, story-telling, children's songs, and so forth. Very soon, however, they discover adult programmes, and come to prefer them. Above all, they prefer the more violent type of adult programme, including the western, the adventure programme, and crime drama. The result is that, even in the early elementary school years, they view more adult programmes than children's programmes. This preference for adult programmes has been reported from every country where a choice is available and where children's viewing has been studied. In the United States the Schramm, Parker, Lyle study (12) noted that as much as two-thirds of children's viewing was of programmes in which adults make up the majority of the audience.

There is a great deal of variation in preference for particular programmes. Even amongst children of the same age, sex, and intelligence, there will be considerable difference in choice of "favourite programmes". Himmelweit, Oppenheim, and Vince (10) noted that even the most popular programme was mentioned by no more than one-third of the children at the two age-levels they studied.

Children's taste patterns are fairly well structured by age 10 or 11, and seem to be consistent among media. That is, a child who likes a given kind of content on television will be likely to enjoy corresponding content in popular magazines or in movies. Tastes for content are related to age, sex, intelligence, and family norms and tastes.

The question has been raised whether children "see what they like", or "like what they see". For example, do they come to enjoy violent programmes because no very attractive alternatives are available, or do the more violent programmes fill so much of the air time because children do not like programmes which critics would say are at a higher "cultural level". This question is by no means settled, but the research does contain at least one interesting finding relating to it. Himmelweit and her colleagues found that when only one channel was available in England, and children had only the choice of ceasing to view, or viewing a programme which they did not expect to find very interesting, they often chose to see that programme and became interested in it. Thus their tastes broaden and may be raised in average level. However, when choices are available at the same time, children tend to choose the type of programme which they have previously found interesting, and thus their tastes are hardened and narrowed.

LEARNING FROM TELEVISION

Abundant evidence has now accumulated that a good teacher can teach effectively by television. Of course, no one contends that all the useful activities of education can be carried on by television. For example, discussion, laboratory work, theme writing, homework, are not substituted for by television. On the other hand, to the extent that teaching goes on by means of lecture and demonstration, then television has an unequalled ability to share the best teaching and the best demonstrations. More than 400 experiments in the United States, comparing classes in which these activities were carried on by television with classes in which they were carried on by the classroom teacher, have shown that in most cases there was no difference in the quality of the final examinations written by the television and the ordinary class, and where there was a difference it was more often in favour of the television class (81). Thus there is real hope that instructional television may "enrich" many classes, that it may furnish expert teaching in fields where few experts are available (for example, in the teaching of foreign languages in elementary school), that it may add a new strength to home and extension teaching, and that it may be useful in some of the developing countries where teachers are in short supply.

Does home television cause a student to do better work in school? This is a hard question to answer. However, the summary on the following page will testify that there is little objective evidence that television helps children's school performance. On the other hand, there is not much evidence that children's grades are poorer when television is available to them. Lower grades go with heavy viewing, but the viewing is not necessarily the basic cause of the poor performance. The observation of most students of children's television behaviour is that heavy viewing tends to be a symptom of stresses or frustrations or unsatisfactory human relationships. The same stresses or unsatisfactory relationships might also reduce a child's efficiency in school, and the frustrations of failing to do good work in school might result in heavier viewing.

Learning from Television : Some of the Findings

	Effect on School Performance	*Effect on General Knowledge and Vocabulary*
GREAT BRITAIN	Brighter students among viewers fell behind non-viewers (10) Viewers among schoolboys did less well than non-viewers (56)	Gain only for younger, slower children (10) Schoolboy viewers better than non-viewers in test of general knowledge (56)
CANADA		Children with TV have higher vocabularies at school entrance (12) Sixth grade children with TV know more about entertainment, less about public affairs, no difference in science (12)
JAPAN	Children with TV can read better (9) Lower grades go with heavy viewing (60) Most parents feel no difference ; a minority feel TV good for grades (65)	No difference (9) Parents think their children better informed (64)
UNITED STATES	No significant difference (57,59) Children and teacher think TV is helpful in school, especially in elementary grades (12) Light viewers did better than heavy viewers in sixth and seventh grades, but IQ not controlled (70)	Children with television had higher vocabularies in pre-school (58)

Most of the debate, however, has centred not on the effect of television on school grades, or on the effectiveness of instructional television, but rather on the incidental learning which children derive from the two hours or more a day they spend on entertainment television. Does television broaden their horizons? Does it teach them skills - desirable or undesirable? Does it give them a distorted view of the adult world?

The general conclusion, as stated by Dr. Himmelweit recently in a manuscript statement concerning the British film inquiry, is disappointment that television does not teach children more than it does. "Surely a medium with such possibilities as television should be able to do more", she writes. "We should by now be able to point with pride to a younger generation more curious, better informed, more enterprising, through having been able to offer them a window to the world. What is wrong? It seems to me a devastating indictment that while the ten-year-olds still pick up some knowledge from television, by the time they reach 13 only the dull ones do so, and that the television hold becomes less the more intelligent the child... It must give even more cause for reflection to realize that these children view almost exclusively programmes designed for family and adult entertainment. Is it perhaps that much of the evening entertainment is at the level of a ten to eleven-year old?" (p. 1).

It was found in Canada that children in a television town came to the first grade of school with vocabularies about a year more advanced than children in a town without television (12). Half a dozen years later, however, these differences had disappeared, and the children with television knew actually less about public affairs (although more about entertainment matters) than the children without television. Here, as in other studies, it was found that in the early school years the bright children seem to make more use of and learn more from television, whereas after age 12 or 13 the slower children seem to use television more and gain more from it, while the brighter ones depend more and more on print (see 65). However, there is also some evidence (e.g., 70) that parents and teachers think the level of general knowledge is increased by television.

Studies of television content, of course, vary in their results from country to country, but many of them point out that television brings a child face to face with adult problems long before he ordinarily would meet them, and in some countries at least tends to give him a view of adult life that is distorted in terms of social class, desirable occupations, and violent ways of solving problems (see Section VI-C). To what extent this television world view becomes a child's real world view, affects his plans and expectations and preparations, and controls his behaviour as an adult is not yet fully known.

There is no doubt that children imitate some of the fashions and customs they see on television. They "play out" television situations, and "take the parts of" their favourite television heroes and heroines. Maccoby states (78), "There is reason to believe that children's attitudes and beliefs can be shaped by what they see on television, and that emotions and impulses are aroused in the child viewer to match those portrayed by screen characters... /Children also use television/ as one of the sources from which they draw material for organizing and interpreting their experiences. They also use it to prepare themselves for their future lives as students, as marriage partners, as members of a professional or occupational group."* It is clear that some of the customs and fashions which used to be learned in the home and from the peer group are now acquired from television. In some cases, also, children in trouble with the law have said that they have learned how to commit a crime from television crime dramas. Although illegal skills like this may often be part of a child's incidental learning from television, still only a few children ever make use of such skills. The soil on which such seeds of knowledge fall determines to a large extent whether the seeds mature. And before the advent of television, children in trouble often reported that they had learned criminal behaviour from the movies, from radio, from the dime novels, and indeed from every source of mass media and personal experience.

WHEN DOES TELEVISION AFFECT A CHILD'S OUTLOOK AND VALUES?

Television has its maximum psychological effect on children, one of the ablest writers on the subject has said, when:

1. The values or viewpoints recur from programme to programme;
2. The values are presented in dramatic form so that they evoke emotional reactions;
3. They link with the child's immediate needs and interests;
4. The viewer tends to be uncritical of, and attached to, the medium (e.g., he has not developed "adult discount");
5. The viewer, through his friends, parents, or immediate environment, is not already supplied with a set of values which would provide a standard against which to assess the views offered on television. (10)

Thus, in order to predict the effect of television one must know something about the television and something about the child. A child with high aggression will probably make special use of the aggressive material he finds in a television programme. Many children may learn from a television crime programme how a holdup is committed, but only a few children - for example, some who have psychopathic tendencies or have fallen under the influence of a criminal gang - are likely ever to make use of this information. For most children, television will be a pleasing experience, a relaxation of tensions and relief from pressing problems; but to some children it will be a confusing experience because they will be unable entirely to separate the fantasy world of television from the real world. Thus the same television programme will not have the same effect on all children, any more than will the same child derive the same effect from all programmes.

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*See the important experiment by Siegel (141).

But there is one element in the relation of child to programme which seems rather more important than any of the others in determining what effect the programme has. This is the extent to which the child can identify with one or more of the characters in a programme. By identification, we mean the experience of being able to put oneself so deeply into a television character, feel oneself to be so like the character, that one can feel the same emotions and experience the same events as the character is supposed to be feeling and experiencing. Thus it is as though the viewer himself were passing through the story which unfolds on the television screen, and as though he himself were making the decisions, enduring the dangers, and winning the victories which the screen hero wins. When a child thus identified himself with a character, he is much more ready to accept an idea or attitude which his hero accepts, or to feel the fright of something that threatens his hero, or the anger his hero feels at some dastardly deed done to him. The emotional experience of viewing is thus heightened, and the likelihood of influence is considerably increased.

TELEVISION AND DELINQUENCY

Most students of television effects on children are unwilling to say, however, that identification or incidental learning from television plays any large part in causing delinquency or crime. The roots of this criminal behaviour lie far deeper than television; they reach into the personality, the family experience, the peer group relationships of the delinquent or criminal individual. At most, television can be merely a contributory cause, and is likely to affect only the child who is already maladjusted and delinquency-prone.

Television may contribute by teaching a criminal skill which may be used when the individual decides to commit a crime. It may trigger off an act of delinquency by feeding a child's aggressive nature. Or it may encourage delinquent behaviour by implanting an unreal idea of the importance of violent behaviour in solving human problems. But in any of these cases, television by itself cannot make a normal, well-adjusted child into a delinquent. This is the almost unanimous conclusion of research and clinical investigation.

THE EFFECT OF VIOLENCE

Because so much of the entertainment a child sees on television is violent, special attention has been paid by researchers to the possible effect of all this violence. No other corresponding effect has been so closely studied. The original hypothesis was that television violence might serve as a safety valve, by means of which a child might rid himself vicariously of pent-up aggressions. This was the conclusion of an early experiment by Feshbach (131). However, other researchers have been unable to replicate that result, and a series of experiments have now come out with exactly the opposite result (see 121, 123-127, 129, 133, 140). Some of these experiments are very ingenious, and the similarity of their results gives us considerable confidence in their conclusions.

The typical method used in such experiments is to frustrate a group of children so that they develop a high level of aggression. Then they are shown a film or a television recording of a drama in which aggressive behaviour plays a prominent part. (In different experiments, the ending, the type of aggression, the nature of the characters, and other elements of the story are varied.) A similar group of children, who have not been frustrated, are shown the same programme. Then the members of the two groups are given chances to express any aggression they may have - either by behaviour or in tests of some type. Invariably there has been a great difference between the experimental and the control group. The children who were not frustrated (the control group) seem no more aggressive than they were before seeing the picture. But the children who were initially frustrated (the experimental group) have not reduced their aggression; if anything, they have built it up. They have in many cases found ways to express it. For example, shown a programme in which a large doll was pummelled and pounded, the experimental group pounded and punched the doll as they had seen done in the programme (125). The control group did not.

Of course, this experiment proves only that the aggressive children had learned to take out their aggressions on the same target used in the programme. Whether they would generalize the impulse, and act aggressively toward other persons or objects, would probably depend on other conditions not controlled by the experimenter. But these results are not entirely reassuring, because they leave little doubt that violent programmes on television do not serve to reduce aggression vicariously, but if anything increase it and encourage its later expression. We know that children with high levels of aggression are especially attracted to violent programmes on television. If television now feeds, rather than reduces children's aggressive tendencies, and if it gives them hints as to how to take out aggression with fists, knives, or guns, then an opportunity may come to use those weapons at a moment when they are angry. We assume this does not happen often because social norms teach them not to behave in such a way. But certainly there is little to make us believe that violent programmes on television reduce the likelihood of violence in real life.

Now let us add another possible element to the situation. Suppose an aggressive child regularly identified with a hero who himself uses violence to solve problems. For example, French investigators (135) found that delinquent boys were very fond of a certain film hero who "fights ... knows how to treat women ... overcomes all obstacles ... respects no moral code and frequently plays an ambiguous rôle; one can never tell whether he is on the side of the police or the side of the gangsters". Analysing the reactions of the boys they were studying, they concluded that such a mass media experience as this is especially dangerous for juvenile delinquents or potential delinquents. Worries have also been expressed about the effect on aggressive children of seeing television heroes who, although on the right side of an argument, still use violence to solve interpersonal problems, and themselves take on the punishing of the "bad guy".

An interesting study by Riley and Riley (138) points out that a child's peer group relationships help to determine how he reacts to violent programmes. The child who has unsatisfactory relations with children his own age is often driven to a fantasy life in which the violence and excitement of the picture tube helps him to forget his own frustrations in real life. This is the kind of child who is more likely than others to confuse the borders of fantasy and reality, and to make use of violence learned from television in order to win honours from his peer group. We know that unsatisfactory home relationships are likely also to drive him to a fantasy life with television (12). Thus a child's home and group relationships are likely to have much to do with the influence, if any, he derives from television violence.

On the whole, the weight of the evidence is behind Berkowitz's conclusion (126) that "the heavy dosage of violence in the mass media", although not a major determinant of crime or delinquency, "heightens the probability that someone in the audience will behave aggressively in a later situation", (p. 134).

TELEVISION AND MALADJUSTMENT

For the reasons just suggested, one of the most important topics in the literature of television research is the relation of television experience to a child's social adjustment and his mental health. This has not yet been adequately examined because of the scarcity of clinical studies, and especially of long-term clinical studies. The conclusions, therefore, must be summarized in a tentative form.

There is ample evidence that television sometimes frightens children, and of what kind of material is most frightening (see 10). But children often like to be frightened (witness the popularity of the roller-coaster!). And, no scholar contends that television is likely to have a deleterious effect on the social adjustment or the mental health of a child who enjoys a warm and solid home and peer group relationship and who has no foundation of mental illness. For this reason, parents have been advised that the greatest defence they can raise against possible ill-effects of television is to make their children feel loved and secure at home, and to help them to satisfactory relationships with friends their own age. And so far as fright is concerned, parents can help their children to avoid programmes that are too frightening.

On the other hand, there are cases in the literature (for example, 157-160), which show that television or films may contribute to a case of mental illness, when the condition exists. What television will contribute depends, then, on the situation, as well as on television content, and the situation depends largely on the personality and environment of the child.

Dr. Lawrence Z. Freedman, a psychiatrist, points out that most children in a reasonably stable environment, do not confuse the make-believe world of television with the real experiences of personal and family relationships (157). "Most youngsters find the immediate personal relationships more compelling and rewarding than the animated, pictorial substitutes", he says. "... The intensity and psychic significance of the child's response to television is the reciprocal of the satisfaction he gains in the milieu of his family, school, and friends. One would predict that the less intelligent, the most disturbed youngsters, and those having the poorest relationships with their families and peers would be most likely to immerse themselves in televiewing as escape and stimulus," (p. 191-192).

Dr. Freedman constructs a pattern of the results likely to occur when television interacts with various degrees of mental instability and maladjustment. Children with schizoid personalities, who tend to avoid intimate relationships with other persons and to live deeply within their own daydreams and fantasies, are likely to use television as a retreat from the stresses of personal relationships. Children with hysterical and dissociative tendencies, who easily identify with and imitate their models, may easily find models on television, but the origin of their illness is not in television. Psychopathic children, poised to rebel, may also find a model of rebellion on television - but the model does not originate their illness. Psychotic children, confused in their identifications, frightened by the violence of their impulses, may find in a violent episode on television the trigger that brings about their own violent behaviour. Or they may, if they are psychotically suggestible, follow literally and completely the recommendations of television advertisers and characters. But it must be pointed out again that the origin of their trouble is not in television, but rather in their personalities and their social relationships.

Does television make children passive and withdrawn? There is no proof that it does (but see 158), although television clearly may contribute to passivity and withdrawal when there is already a schizoid tendency present. As Freedman points out, "when the automobile removed youngsters from the surveillance of their homes, we were concerned for their morals. Now television immobilizes them in the living room and we deplore their passivity", (p. 193). Nor is there any real evidence that television is good or bad for home life. It keeps children more often at home. But watching television in a group does not seem to make for a really strong group relationship; each member of the family reacts individually more often than as part of a group, to the television he sees. The conclusion is that television is not likely either to ruin a healthy home relationship or rescue an unhealthy one. And a reasonable corollary is that the quality of a child's social relationships is more likely to control his use of television, than vice versa.

PHYSICAL EFFECTS

In general, the evidence on physical effects is negative. Television postpones average bedtimes a few minutes, but seems to decrease sleeping time very little because children who have stayed up later appear to go to sleep more quickly. It is true that there are reports in the research of children who are frightened by evening television and unable to go to sleep, and of children who are sleepy in school because they have stayed up late at night to see a programme, but none of the studies can find any evidence of widespread fatigue or other physical effect related to television. Indeed, there is some reason to think that standards of behaviour set by the parents may have more to do than television with late bedtimes, and that if these same homes did not have television the children might still stay up late for other purposes.

Nor is there any evidence that television, viewed properly, has a bad effect on children's eyesight. Some specialists say that reading is as likely as viewing to cause eyestrain, and others say that viewing is good "exercise" for the eyes. In general (see 10, p. 441), opthalmologists advise children to view television in a room where the television receiver is not the only source of light, and not to sit closer than six feet from the screen, and to sit with the screen at approximately eye level. (The British opthalmologists say, "eye level or slightly below"; the Polish say, "eye level, or a bit higher", (12, 165). Even eye weariness resulting from protracted and improper viewing can be overcome in a short period of rest, a Japanese study found (163).

SOME NEEDED RESEARCH

This has been merely a suggestive account, and in no sense a complete summary, of the research listed in the bibliography that follows. Even this overview, however, must have suggested some of the gaps in the research. We are now rich in surveys, and, except where a country which has not had a large survey wants a broad picture of the television behaviour of its children in order to see how their behaviour is different from that revealed by other such surveys, there seems less need now for survey than for experiment. Perhaps the most obvious need is for additional close experimental and clinical studies of the effect which a given kind of television has on a given kind of child. It may be a long time before close, careful studies like these answer all the effect questions, but without such studies we shall never be able to say clearly and sharply what we are measuring and where our results apply. Whenever possible these studies should be extended over a period of years, so that we may begin to understand the cumulative effects of television.

Another aspect of television which deserves more attention than it has had in the past, is the problem of how to realize the potential of the medium. Early in this chapter we reported some disappointment with the fact that television had not completely fulfilled its potential as a window on the world; it had not given us a generation better informed, more curious, and so forth. Instead of that it has merely provided the average child with two to three hours of daily entertainment. Perhaps now we should study how to make the non-entertainment, non-fictional programmes on television more interesting, so that they will attract their share of viewers and contribute their share of learning. And perhaps, too, we need to study how taste is formed, so that instead of narrowing our children's taste around a certain level of entertainment we can broaden their television interests and encourage them to use television when possible as a window on the world rather than as a momentary escape from the stresses of growing up.

I. BIBLIOGRAPHIES AND SUMMARIES

A. TELEVISION*

1. Bogart, Leo. *The age of television; a study of viewing habits and the impact of television on American life*. 2nd ed. New York, F. Ungar Pub. Co., 1958. 367 p.

This book summarizes the growth of television in the United States, to 1957. Although now outdated by later publications, the material on television and children was the most complete summary of research up to that time. There is a summary of early research on television's supposed effect on children, of early studies of children's viewing, and of many of the criticisms of television's content.

2. Coffin, Thomas E. Television's impact on society, *American Psychologist*, No. 10, 1955. p. 630-641.

A review of research on the impact of television on society, the family, children, school achievement, etc. The review carries through 1954.

3. Dieuzeide, Lucienne. Télévision et éducation. Une bibliographie sommaire /Television and education. A summary bibliography/. Prepared by L. Dieuzeide for the *Centre audio-visuel de Saint-Cloud*. Paris, *Institut pédagogique national*, 1958. Supplement, 1959. 217 p. and 28 p.

An unannotated listing of the chief titles on this topic from France and other countries. Several pages are devoted to "the effects of television".

4. Harris, Dale B. *Children and television; an annotated bibliography*. Urbana, Ill., National Association of Educational Broadcasters, 1959. 50 p.

A useful annotated bibliography. The notations on research are now outdated, but the summaries of opinion and advice are still useful.

5. Klapper Joseph T. *The effects of mass communication*. Edited by Paul F. Lazarsfeld and Bernard Berelson. Glencoe, Ill., The Free Press, 1960. 320 p.

Reviews the major studies up to about 1959 only. The central point of view is that the mass media very rarely act on a person directly, but usually through a set of "intervening variables", both personal and social.

B. RELATED STUDIES OF FILM

6. Charters, Werrett W. *Motion pictures and youth: a summary*. New York, Macmillan, 1933. 66 p.

The summary of the Payne Fund studies, conducted in the United States in the early 1930's, on the effects of motion pictures on children and youth. The studies appeared in 12 volumes, in addition to this summary, and the volumes which have most relevance for the study of television effects are abstracted separately in the present bibliography.

At the time when the Payne studies were made, American children 5 to 8 years old averaged just under one movie every fortnight; those aged 8 to 19 averaged almost exactly one movie per week. At that time, the theme of about 30 per cent of all movies was love, of 27 per cent crime, and of 15 per cent sex.

To sum up briefly, the findings were that movies were indeed having significant effects on children and they remembered a great deal from them. Children's attitudes were frequently changed by films, and this attitude change was often cumulative - hardly noticeable after a single exposure, but gathering strength and depth with repeated exposure to pictures of a given kind. It was found also that movies often roused strong emotional reactions in children, and that if and until "adult discount" was developed the movies often "took possession" emotionally of these children. Finally, it was found that movies do influence children's behaviour, notably their play. When a group of delinquents was studied, it was found that they went to the movies oftener than the average for their age. But the researchers stopped short of blaming delinquency on movies, pointing out that movies are only one strand in the experience that goes into delinquency. Furthermore, the same films may have quite different effects on different children. The effect, they said, is "specific for a given child and a given movie". It is not easy to draw general conclusions regarding such influence which would be applicable for all movies and all children.

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* A bibliography of 106 titles, without annotations, will be found in Himmelweit, Oppenheim, and Vince (12); an annotated bibliography of 91 titles will be found in Schramm, Parker, and Lyle (14)

7. Keilhacker, Martin. Neuere psychologische und pädagogische Forschungsergebnisse auf dem Gebiet 'Jugendschutz und Film' /Results of recent psychological and pedagogical research on the protection of youth and the cinema/. Jugend und Film, München, No. 1, 1958. p. 13-30.

A summary of child development theory and some film effect studies, chiefly by German and American researchers.

8. Unesco. The influence of the cinema on children and adolescents; an annotated international bibliography. Paris, 1961. 106 p. (Reports and Papers on Mass Communication, No. 31.)

Annotations on 491 titles, including both research and comment. Many of these findings are applicable to television. A considerable number of these titles are annotated in the present volume.

II. LARGE GENERAL STUDIES OF CHILDREN AND TELEVISION

9. Furu, Takeo. Television and children's life: A before-after study. Tokyo, Japan Broadcasting Corporation, Radio and Television Culture Research Institute, 1962. (In Japanese).

In a medium-size Japanese industrial city, 3,700 children in the third, fifth, and eighth grades, were selected by sampling school classes, and information was obtained about their daily routines after school. At the time of this first survey, television was not yet available in that city. Two years later, after both commercial and non-commercial television had come into the city, the former third and fifth-grade students were followed up, and it was possible to interview about 80 per cent of them. Of these, about 30 per cent now had television in their homes. A control group, matched as well as possible, was formed from the pupils whose families did not yet have television. The children with television (the experimental group) and those without television (the control group) were then compared in a number of ways.

It was found that fifth-grade boys with television went to bed on Sunday, on the average, about 17 minutes later than the control group. Home work time was reduced, on the average, about 14 minutes a day in the same group of boys. (The difference was in the same direction and significant for the other groups also.) Television had replaced some of the time previously spent on other media, and home activities such as chores and playtime were also somewhat reduced in the television group as compared to the control group.

On the other hand, there was only a very little difference between the two groups in respect of time devoted to social and creative activities.

The increase in reading ability between the before and after tests was significantly smaller for the seventh-grade boys from the television homes. There was no significant difference between the girls' experimental and control groups of the same grade. No noteworthy differences were found in their scores on science and social studies achievement tests.

Paper and pencil tests in after-only comparison failed to reveal any greater "passivity", "escapist tendency", or "nervous tendency" in the television children.

This study was made by the Radio and Television Cultural Research Institute of the Japan Broadcasting Company (NHK). Earlier reports on some parts of it were published in the Institute's Monthly Bulletin. These partial reports will not be listed in this bibliography except as they add significant findings to those reported in this summary article.

10. Himmelweit, Hilde, Oppenheim, A.N. and Vince, Pamela. Television and the child; an empirical study of the effects of television on the young. In collaboration with D. Blumenthal and others. London, New York, Published for the Nuffield Foundation by the Oxford University Press, 1958. 522 p.

This carefully designed research was carried out with equally great care in England in 1955 and 1956. A total of 473 thirteen- and fourteen-year-old children and 454 ten- and eleven-year-old children, who habitually viewed television, were matched with groups of similar size, age, sex, I.Q., and social class who did not view television. In addition to these comparisons between viewers and non-viewers, the researcher also made a study of 376 children in Norwich, before and after their families installed television. These children kept diaries and answered questions. Questions were also asked of teachers, and the content of television programmes was analysed.

The following summary of conclusions is reprinted, with permission, for Schramm, Lyle, and Parker, Television in the Lives of Our Children (q.v.):

Who are the early viewers? The people with strongest need for ready-made entertainment.

How many hours per week do children view television? Viewers in both age-groups watched 11 to 13 hours a week, more time than they put on any other leisure activity.

What factors reduce interest in and time spent on viewing? Lower viewing goes with high intelligence, with an active life, and with parental example in that direction.

Do the children watch many programmes designed for adults? Yes, many.

What kinds of programmes do children like best? Three-quarters of the votes were for adult programmes, particularly crime thrillers. Adult political programmes, documentaries, and discussions held little appeal. Even the most popular programme, however, was mentioned by no more than one-third of the children.

Can children's tastes be developed by seeing programmes which are not, on the whole, popular with children? When only one channel was available, it was observed that children viewed and came to like programmes they ordinarily would not have selected.

How is taste affected by access (in Great Britain) to a second channel? Programmes with educational value or those produced especially for children are most likely to suffer.

What constitutes television's appeal for children? Easy availability ... value as time filler ... the satisfaction of being in the know ... security and reassurance through familiar themes and formats ... change, excitement, suspense ... escape ... identification ... warm and friendly personalities.

To what extent is the child's outlook coloured by what he sees on television? The values of television make an impact if they are presented in dramatic form, if they touch on ideas or values for which the child is emotionally ready, and if the child cannot turn for information on the same points to parents and friends.

What frightens children on television? Realistic rather than stylized violence; fictional events in horror or space programmes. Viewing in the dark or alone makes fright more likely.

What types of aggression prove most disturbing to children? Guns least, daggers and sharp instruments most. Danger to animals like Lassie.

Do these programmes make children aggressive? No evidence was found that they did; but, on the other hand, there was no evidence of beneficial result.

Does television improve a child's general knowledge? A net gain was found only for the younger, duller viewers.

How does television affect children's schoolwork? Brighter children tended to fall behind comparable children who were non-viewers.

What is the effect of television on leisure? Younger viewers reduced cinema-going, and all children listened less to radio after television came. Book reading was less at first, then returned to the expected level. Entertaining at home increases with television, but casual companionship somewhat decreases.

What is the effect on family life? It keeps members of the family at home more, but really does not bind them together.

Does television make children passive? The authors found no evidence that it does.

Does television make children more enterprising, or stimulate them to make things, enter competitions, visit places of interest, or develop new hobbies? On the whole, they conclude, it does not.

What is the effect of television on night rest and eyesight? Bedtime is, on the average, about twenty minutes later in television homes, but the television children turn out the light more quickly and play less in bed. Defective eyesight was no more frequent among viewers than non-viewers.

What type of child becomes a television addict? The authors treat addiction simply as heavy viewing. The chief correlates are lower intelligence, insecurity, maladjustment, and inadequate contacts and friendships.

11. Maletzke, Gerhard. Fernsehen im Leben der Jugend [Television in the life of youth]. Hamburg, Hans Bredow Institute, 1959. 208 p.

After summing up some of the previous literature on adolescents, delinquency, and television, this book reports a study made from tape recordings of interviews and group discussions with Hamburg youth. The total sample was 400, divided into matched groups of viewers and non-viewers of television. The ages of these youth are 15 to 20, and thus the results of this German study cannot be compared precisely to those of the Himmelweit, Oppenheim, and Vince study in England (where the ages were 10 to 14), or the Schramm, Lyle, Parker study in the United States (where the ages were 3 to 16). Yet the conclusions are in many ways parallel to those of both the British and the American studies.

These German 15 to 20-year-olds watch television, on the average, between 7 and 8 hours a week. This is probably somewhat less than their counterparts in the United States (where 16-year-olds average between 12 and 14 hours a week). However, German television is on only one channel and many fewer hours of television are available in Hamburg than in an American city of comparable size. Half the German youth watch television every night. Most of them take it lightly, responding even to TV news as a form of entertainment, and being rather uncritical about the source and quality of programmes. As good points about television they named, for example, that it carries information, knowledge, and pictures; it entertains; and it brings movies into the home. As bad points, they say that television seduces one so that one spends too much time looking; that it is not good for family life; that it is dull, and suppresses both imagination and talk.

Dr. Maletzke could find no conclusive evidence that television causes juvenile delinquency, or has any clear and spectacular effect whatsoever on the social behaviour of youth.

12. Schramm, Wilbur, Lyle, Jack and Parker, Edwin B. Television in the lives of our children. With a psychiatrists' comment on the effects of television by Lawrence Z. Freedmann. Stanford, Ca., Stanford University Press, 1961. 324 p.

This book is based on responses (diaries, interviews, questionnaires) from 6,000 children, 2,000 parents, and several hundred teachers in the United States and Canada. Samples came from large cities and small towns, including two comparable communities, one with and one without television.

One result of this large study was the most detailed picture yet obtained of children's television habits. In the United States, about one-third of all children are using television with some regularity by the age of 3; 80 per cent of them, by the time they go to kindergarten; 90 per cent, by the time they are in the first grade. At 3, the average child is spending about 45 minutes a day on television. By the time he is in the first grade, he is spending a little over two hours a day on television. Viewing time slowly increases until about the age of 12, when it increases sharply to something over three hours a day. Then viewing time slowly falls again, until by the end of high school the time is again a little over two hours. But there are great individual differences: when the *average* is two and one-half hours, some children are spending more than four hours on television, and others less than 30 minutes. Television dominates the mass media time of American children.

Except in the very early years, there is no distinct boundary between adult and children's programmes. First grade children were found to be devoting 40 per cent of their viewing time to programmes that are usually thought of as adult. The authors estimate that well over two-thirds of all children's viewing between the ages of 3 and 16, is devoted to programmes for which the majority of the audience is adult.

What children are heavy viewers? Those whose parents are heavy viewers; in the first six or eight years of viewing, the brighter children; after that the brighter children turn away, and the slower ones become heavier viewers; and children who have family troubles or unsatisfactory social relationships, from which they retreat to television.

The authors say no informed person can say simply that "television is good or bad for children. For *some* children, under *some* conditions, *some* television is harmful. For *other* children under the same conditions, or for the same children under *other* conditions, it may be beneficial. For *most* children, under *most* conditions, *most* television is probably neither particularly harmful nor particularly beneficial". Much of the book is therefore devoted to ascertaining the critical conditions.

Here are brief answers to some of the key questions in the concluding chapters:

What do children think of television? It has enormous prestige with them, but the brighter ones think much less of it in their teens.

What do children use television for? Partly as a social tool (like an automobile, for a date). Largely for its fantasy which lets them put aside real life problems. And also for information, for its help in solving real life problems. But overwhelmingly as entertainment, escape, fantasy.

Is a child better informed as a result of television? Children in a television town come to school with larger vocabularies than do children in a comparable town without television. This difference vanishes, however, in a few years. Thereafter, heavy viewers know more about light topics (such as the entertainment personalities they see on television), less about public affairs (which light viewers seem to learn from print), and neither more nor less about subjects like science, which they learn chiefly in school.

Does television stimulate intellectual or creative activity? It is more effective in stimulating interest than activity.

Does television make children passive? No evidence is found for this.

Does it prematurely "age" children? It certainly exposes them to adult ideas and behaviour earlier.

Does it often frighten children? Almost every young child, at some time, is frightened by a television experience. Findings on *what* frightens children agree with Himmelweit, Oppenheim, and Vince.

Is television too exciting for children? The question is discussed, but no definite answer is found.

Does television violence teach children violence? A child with psychopathic tendencies is likely to pick up from television a suggestion for violence. A frustrated, aggressive child is at least as likely to have his aggression increased as to have it released by television, and at a later time when violence is called for he may remember some of the techniques he learned on television. For most normal children, there is no evidence that television brings out in them violent behaviour.

Does television cause juvenile delinquency? Television can contribute but can hardly be the basic cause.

In the course of discussing other possible effects, and what parents, broadcasters, and researchers can do about it, the authors several times point out the importance of a warm, secure home and of satisfactory peer-group relationships as an antidote to any potential harm that might come from television.

The book has 100 pages of tables, and a long annotated bibliography.

III. PATTERNS OF CHILDREN'S USE OF THE MEDIA AND EFFECTS ON THEIR LEISURE TIME*

A. TELEVISION

13. Abrams, Mark. Child audiences for television in Great Britain, Journalism Quarterly, Vol. 33, No. 1, 1956. p. 35-41.

This survey of 1,500 children, eight to 15 years old, in Great Britain, indicates that these children prefer adult to children's programmes, and that working-class children are more likely than middle-class children to prefer adult programmes. The greatest effect of television on these children's media habits seemed to be a reduction of radio listening. There was little evidence of television effect on movie-going, reading comics, and membership in clubs. Whereas working-class children reported they prefer television to other media, so middle-class children say they give highest preference among media experiences to reading books.

14. An analysis of children's interest in children's radio drama. In: Nippon Hoso Kyokai, Surveys and experiments of school broadcasting. Tokyo, 1960. p. 237-254.

A study was made to discover what factors in programmes attract children's interest. Schoolchildren of 5th and 8th grades were the subjects of the study and 11 programmes were selected for the test. A group of child psychologists noted 26 characteristics or factors in each programme that were thought to attract the interest of children. A comparison of the item analysis with the children's preference for different programmes showed 18 constant factors. To mention a few, these included the story being based on the real life of the children, the plot being written in a simple, clear way, some emphasis in the context on sociability and humour, etc.

15. Bailyn, Lotte. Mass media and children; a study of exposure habits and cognitive effects. Washington, American Psychological Association, 1959. 48 p. (Psychological Monographs, Vol. 73, No. 1).

Miss Bailyn studied the listening, viewing, and reading habits of about 600 fifth- and sixth-grade children, and compared differences in these habits with social and psychological differences in the children. She found that the "pictorial media" - as she called television, movies, and comic books - seemed to attract children with many of the same characteristics. That is, boys were more likely than girls to make frequent use of the pictorial media, children of blue-collar families more than children of white-collar families, children of lower I.Q. more than children of high I.Q., and Catholics more than Protestants. She also found that girls who are high-achievers (for example, those whose schools are better than their mental ability would seem to predict) are less likely than under-achievers to make a great deal of use of the pictorial media. She found, also, that the "aggressive hero" type of programme is more likely to be selected in these media by boys who are rebelliously independent, have low I.Q. scores, and are often spanked - in other words, those who are probably highly aggressive themselves.

16. Bambini e ragazzi dinanzi al televisore /Kids in front of the television/, Bolletino Doxa, 20 July 1962. p. 140-142.

This is a report of a sample survey conducted for the purpose of estimating the probable number of very young children who watched TV on an average day in the spring of 1961. The survey results show that a large number of the younger children watched the programme intended for adolescents of 17 and 18, while the latter were more likely to watch the evening programmes for adults.

17. Battin, Tom G. The use of the diary and survey method involving the questionnaire technique to determine the impact of television on schoolchildren in regard to viewing habits and formal and informal education. Ph.D. Thesis. Ann Arbor, Mich., University of Michigan, 1952. 318 p. (Publication No. 3578).

A study of seven-day diaries kept by children in Ann Arbor, Michigan, who had had television for six months or more in 1951. It was calculated from the diaries that children in grades one through six (ages 5 through 12) averaged 18.5 hours of television viewing per week, and children in grades seven through 12 (ages 12 through 18) averaged 21 hours television per week.

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*See also especially 10, p. 91-168, and 313-66; 12, p. 24-97; and 9 and 11, passim.

18. Becker, Samuel and Wolfe, Glenn J. Can adults predict children's interest in a televised programme? In: Schramm, W. ed. The impact of educational television. Urbana, Ill., University of Illinois Press, 1960. p. 195-213.

It was found that teachers, specialists in child education, and mothers could all predict fairly satisfactorily what parts of a television programme would interest fifth-grade children (10 or 11 years old), but that they could not very satisfactorily predict the parts that would interest pre-school children (four or five years old). Some doubt is cast on the results because Becker was not able to validate his technique for measuring the "true" interest of the younger children in the programme; he had to depend on observation of the children while they watched it.

19. Belson, William A. The effects of television upon family life, Discovery, Vol. 21, No. 10, 1960. 5 p. (Research Techniques Division of London School of Economics and Political Science, Reprint No. 127).

A total of 8,200 viewers and non-viewers in England completed diary-type questionnaires for the BBC. Groups were matched by Belson's technique of reweighting a number of variables in terms of their association with the variable under study. Conclusions: Television has brought about a number of small changes in home life, but nothing sweeping or spectacular. There has been an increase in the number of visitors to homes with television; a redistribution of the times in which a family is at home together (in general people are more often at home in the evening, less often in morning and afternoon); a small reduction in the amount of things adults do for children in the home (for example, reading a story to a child); a very small decrease in the number of things a family did together (excluding television viewing); and some substitution of television viewing for other ways in which the family entertained visitors.

20. Boesler, Pawel. Les téléspectateurs et le programme de la télévision de Poznan /The viewers and television programmes in Poznan/, Biuletyn Telewizyjny, No. 2, 1958. p. 9.

Responses from 258 of 809 television owners in Poznan to whom questionnaires had been sent led to the conclusion that children and youth constitute about 54 per cent of the viewers of television in this part of Poland. About 74 per cent of respondents expressed themselves as highly pleased with the children's programmes.

21. British Broadcasting Corporation. Facts and figures about viewing and listening, in twelve charts with a commentary. London, 1961. 31 p.

Summarizes results of BBC audience survey figures (in which 4,000 persons are interviewed personally every day, on an aided recall method) as of the end of 1960. Concludes that the average British child of five to eleven years watches television for more than two hours a day, whereas the average child of twelve to fourteen watches television nearly one hour and a half. The commercial television programmes (ITV) attracted at that time - October-December, 1960 - somewhat larger percentages of the children than did BBC. At any time between 5 and 9 p.m., 50 per cent or more of children between five and eleven years of age are likely to be viewing television. About 55 per cent of children twelve to fourteen view television between 5 and 6 p.m., but after 6 p.m. only 30 per cent of these older children are likely to be viewing. Apparently homework competes for their time.

22. Children's viewing patterns and factors influencing their programme choices, Annual Bulletin of the Radio and Television Culture Research Institute, No. 6, 1961.

In addition to material already summarized, this article reports that children who had favourable relationships with their parents tended to select a wider variety of programme types than did children whose home relationships were unfavourable. The same holds true for active children as compared to those who are less active.

23. Clark, W.J. Of children and television. Cincinnati, Ohio, Xavier University, 1951.

On the basis of 750 questionnaires filled out by sixth- and seventh-grade children (11 to 13 years old) in 1950-1951, this investigator concluded that these children spent 3.7 hours a weekday on television.

24. Content analysis of programmes preferred by children, Monthly Bulletin of the Radio and Television Culture Research Institute, Vol. 10, No. 9, 1960.

The content of 70 programmes known to be favourites of children was measured during one month. The programmes included adventure, detective and thriller, home drama and comedy programmes. It was found that these would have brought a child into contact with only two countries (Japan - 46 programmes, and the United States - 22 programmes). In the aggressive-hero type programmes, justice, courage, and self-confidence were stressed, while the villain usually illustrated cruelty, selfishness, and violence. Certain important characteristics desired in everyday life, such as fairness, diligence, and decent manners, were practically ignored in the four types of drama. In the aggressive-hero type dramas, good invariably overcame evil, but in a majority of the cases violence was the means used to overcome the evil.

25. Cunningham and Walsh. Videotown, 1948-1957. New York, Cunningham and Walsh Pub., 1958. 21 p.

This is a summary of ten annual surveys of television viewing in the city of New Brunswick, New Jersey. At the time of the first survey, in 1948, only 1 per cent of the homes had television; in 1957 92.7 per cent had it. Average hours of viewing increased slowly to a peak in 1955, and slowly decreased thereafter. It was 3.21 hours a day in 1957. About three-fourths of all children viewed on an average evening in 1957 - two hours per evening on the average. The general average for children under 10 was about two hours a day on television; children 10-18 averaged 2.4 hours. As television came into Videotown, movie attendance was very much reduced, as was magazine reading. Radio listening had fallen almost to nothing by 1951, but thereafter slightly increased each year. Of all the media, only the newspaper has never shown any reduction in time attributable to television.

26. An effect study of TV on children's behaviour with the difference of intelligence as an intervening variable, Annual Bulletin of Radio and Television Culture Research Institute, No. 6, 1961.

Through the data obtained from the second survey of the large study, the children with higher intelligence and with lower intelligence were divided into TV and control groups. Analysis of variance for the total leisure time activity revealed that the factor of TV acted more strongly than the factor of intelligence. TV and intelligence interacted with each other upon the fifth-grade children in respect of homework time. Among the children with higher intelligence, TV groups displayed a tendency toward shorter homework time, but TV groups composed of the children with lower intelligence reported longer homework time.

27. An effect study of TV on children's behaviour with cultural environment as an intervening variable, Annual Bulletin of the Radio and Television Culture Research Institute, No. 7, 1962.

Home cultural environment of a large sample of children was evaluated in terms of children's play equipment, library, study room, and other equipment and furnishing. As far as possible, groups rated high in cultural environment were matched with groups rated low. Fifth graders in the low environment group were found to view more heavily than fifth graders in the high group, but this difference was not found among seventh graders. Among the seventh graders with high cultural environment, those with television scored higher in reading tests than those without television. In the fifth grade high-environment group, those with television scored higher in social studies tests than those without television.

28. Fager, J. and Smith, R. New views on television, National Parent Teacher, No. 46, 1951. p. 39-40.

Slightly more of the parents in an upper middle-class suburb thought that television had not affected the parent-child relationship than thought it had. Less than 3 per cent felt that television harmed their children's school work, 20 per cent thought it actually helped. Most of the parents reported that the children's interest in such activities as scouting, dramatics and music had not been lessened by television, and most reported no bad effects on sleeping or eating habits or emotional adjustment.

29. Fine, B.J. and Maccoby, N. Television and family life; a survey of two New England communities. Boston, Boston University School of Public Relations and Communications, 1952. 37 p.

A study of children in two New England communities found that adolescents watch less television than younger children, and that there was no significant difference between viewing patterns between children who had had a television set for six months and those who had had a set for two years.

30. Geiger, Kent and Sokol, Robert. Social norms in television watching, American Journal of Sociology, No. 65, 1959. p. 174-181.

Examining survey data they had gathered from more than 500 persons in the Boston area in 1956, these sociologists came to the conclusion that there is a normative quality about television viewing. They noted that people tended to speak of television viewing as chiefly entertainment seeking, which, they say, more nearly fits "the value given to immediate gratification in the lower or working class than ... the time orientation and ideal of deferred gratification of the middle class". Therefore, they felt that middle-class people were less likely than lower-class people to be proud of their television viewing; in fact, they thought they found evidence of a taboo in the middle class against television watching. This led them to speculate as to the conditions which might bring about addiction to television viewing. They said: "(1) behaviour involving gratification but subject to cultural taboos is likely to lead to addiction; (2) there is a taboo against television viewing in the middle class but not in the working class; (3) television addicts would therefore be found predominantly among middle-class persons who are constant viewers."

31. Graham, S. Cultural compatibility in the adoption of television, Social Forces, No. 33, 1954. p. 166-170.

Who are the first people to put television into their homes? On the basis of interviews with 150 heads of households in New Haven, Connecticut, Graham concludes they are persons whose recreations and behaviour before television were most compatible with the behaviour television demands. The people who accepted television early were more likely to be movie-goers and radio-listeners rather than book-readers, less likely to engage in active types of recreation. Early accepters were also more likely to be persons of low education and low income, for whom television offered non-demanding recreation, at home, at little cost after the initial price of the receiving set.

32. Gratiot-Alphandéry, Hélène. L'enfant et la télévision /The child and television/, L'école des parents, No. 4, 1956. p. 14-21.

This article is an attempt at a summary of the influence on children of television. The effect of television on the child's life, says the author, is to decrease the hours of sleep, to increase the hours spent at home, and to cause the child willingly to abandon some of his reading in favour of the television - although, of course, when the television programme relates to a book, then that book enjoys an amazing success. The reactions of the child are summarized as follows: the child makes a choice amongst the programmes, typically prefers spectacles and variety, and shows a marked interest in the stars and other living persons.

33. Gratiot-Alphandéry, Hélène and Rousselet, Jean. La télévision et la famille /Television and the family/, L'école des parents, No. 3, 1961. p. 24-37.

In the course of a survey study of 279 French families, both rural and urban, workers and middle class, four questions were asked in particular reference to children and television. Asked whether, following television programmes, they talked about the programmes with their children, two-thirds of the parents said "sometimes", one-third said "often". Ninety per cent of the parents said that they considered certain programmes bad for their children. Asked what action they took when they believed the programme was not suitable for children, 20 per cent said they turned off the set, 68 per cent said they sent the children away from the set, and 12 per cent said they let the children watch the programme anyway. Concerning the effect of television on children's work, several ideas were advanced. One was that suppressing the TV was sometimes a good way to get studying done. Another was that children become more interested in their school work when they find in certain scientific or historical programmes references to topics they are studying. And finally, some parents noted that television is not attractive enough to affect school work which is motivated by serious future plans or professional goals.

34. Hakuhodo Advertising Company. Research Division. Television - effect on children. Tokyo, 1956.

On basis of questionnaires from 501 parents in TV homes reported, among other things, that 25 per cent of the parents complained that their children did not come to dinner promptly when they were called to dinner from the TV set.

35. Hart, W.A. 't. Bioscoopbezoek door jongeren. Een bijdrage tot de verkenning van het vraagstuk film en jeugd aan de hand van een enquête, in opdracht van het Instituut Film en Jeugd, Uitgevoerd door het ISONEVO /Visits to the cinema by young people. A contribution to the study of the problem of the cinema and youth, based on a survey carried out by ISONEVO on behalf of the Instituut Film en Jeugd/. Rotterdam, W.L. & J. Brusse, 1955. 45 p.

Summary report of a questionnaire survey by the "Instituut Sociaal Onderzoek Nederlandse Volk" in 1951-1952 among Dutch youth 14-19 years of age and of different socio-economic, ideological, and educational backgrounds. Covers questions on frequency of film attendance, kind of movies, evaluations, motivations, selection, etc. The average frequency was once a month, the liberally educated showing the highest frequency and orthodox Protestants the lowest. Attendance was mostly on weekends, at first evening performances, and in winter. Boys were more likely than girls to go alone to the cinema and were less dependent on parental permission. Oral information and critics determine the choice, girls being influenced mainly by stars. Boys prefer detectives, westerns, war and maquis films; girls prefer films on daily life, nature and animal films; historical films are appreciated by both.

36. Japan. Ministry of Education. Effects of television on children, 1959, Shimbun Kenkyu, No. 116, 1961. p. 4-11.

A diary study of 7,200 sixth- and ninth-grade students, in nine prefectures, revealed that those who viewed television more than three hours a day also read newspapers more than the average, but went to the movies considerably less than the average for their age, and the sixth-grade students also listened less to radio. Sixth-grade children who were heavy viewers had slightly higher school grades than light viewers. There was no such difference in the ninth grade.

Questionnaires answered by 2,750 parents who own television sets indicated that newspaper reading increases with length of time television sets have been owned. (Other studies, however, have shown that it also increases considerably with age up to the beginning of adulthood.)

37. Kösel, Edmund. Jugendliche und ihre Fernseheninteressen /Young people and their interests in television/, Jugend, Film, Fernsehen, No. 3, 1960. p. 32-44.

A study of 165 Munich children, by means of interviews, discussion, and material written by the children. Considerable differences were found in their interests. Among leisure time activities, they said they were most interested in sports (69 per cent), cinema (54 per cent), television (39 per cent), and reading (38 per cent). Their television tastes depended greatly on their ages. Only 37.5 per cent of them said they watched television every day, and 50 per cent watched occasionally.

38. Lewis, Philip. TV and teen-agers, Educational Screen, No. 28, 1949. p. 159-161.

In 1949, 1,700 high school students (about 13 to 18 years old) filled out a questionnaire concerning their television viewing habits. Average viewing time per day: 3-4 hours.

39. Maccoby, Eleanor E. Television: its impact on schoolchildren, Public Opinion Quarterly, Vol. 15, No. 3, 1951. p. 421-444.

Two groups of 311 children each, one group with, one group without television, were matched for age, sex, and socio-economic status. The time was 1950 and 1951; the place was the Boston area. The study found that children at that time were substituting television for radio, movies, and reading, for some of their play time, and for some of the time they had previously spent on household tasks. Television increased the time the family spent together, but reduced the amount of joint family activity of any other kind except TV-viewing. The investigator concluded that the family contact brought about by television is really individual, rather than social activity, except for the fact of being in the same room with other persons.

40. Magnin, William. Les émissions pour la jeunesse [Programmes for young people], Cahiers d'études de radiotélévision, No. 23, 1959. p. 307-310.

The author's observations lead him to the conclusion that there is more difference between the reactions to television programmes of a child of less than six years and one of twelve years, than between the reactions of an adult of 20 and an adult of 60. The programmes that appeal particularly to children of six to nine years, he states, are marionettes. From 9 to 12, the child is particularly interested in romances, drama, and comedy. After 12, the tastes of the young persons approach those of adults.

41. Markowski, Daniel. La télévision dans la campagne silésienne [Television in the Silesian countryside], Wies Wspolczesna, No. 5, 1960. p. 151-155.

Based on questionnaires and observation in the village of Siolkowize, the conclusion was reached that most children want to watch adult television programmes. The majority of parents consider the children's programmes of "inferior quality". The integrating influence of television is observed perhaps more often in the relations between neighbours than among the members of a family. About five per cent of the persons interviewed said that they bought their own receiving sets "so that the children would not run to the neighbour's house to see TV". However, the families with television sets tended to have relatively few children. Ten per cent of the families with sets had no children, 45 per cent had only one, 18 per cent two, and 27 per cent three.

42. Mehling, Reuben. Television's value to the American family member, Journal of Broadcasting, Vol. IV, No. 4, 1960. p. 307-313.

A mail questionnaire and interviews with families in Indiana (U.S.A.), indicated that about 55 per cent of high school age children, and over 90 per cent of grade schoolchildren, say they would keep television in preference to all other media, if permitted to keep only one. A small number of children kept diaries for the survey. These showed that the grade schoolchildren were spending about 17 hours a week with television, 1.9 hours with newspapers, and half an hour with radio. The high school children, on the other hand, were spending 10.4 hours with television, 2.3 hours with newspapers, and 3.3 hours with radio. College age youth were spending 9.1 hours weekly with television, 4.4 hours with newspapers, 4 hours with radio. It should be noted that these were very small samples.

43. Mori, Shigeru. Reference group as an intervening variable in the mass communication process, Annals of Educational Research, No. 6, 1960.
------------ TV programme preferences of children and their reference group, Radio-TV Education, Vol. 16, No. 8, 1961.

These papers attempted to demonstrate the hypothesis that the value-orientations of the reference group to which an individual belongs or aspires are an important variable in his media behaviour. The research was undertaken among 2,793 children from the fourth through the ninth grades of certain public and private schools in Hiroshima. On the basis of the questionnaires and the factor analysis method, the pupils were divided into those who used the peer group as a reference group and those who did not. Pupils who shared the values of their peers were found to be much more apt to like the pleasure-oriented material in the commercial programmes (e.g., action or violence), while the family-oriented groups were significantly more likely to be fond of reality-oriented material or educational films.

44. Nederland. Centraal Bureau voor de Statistiek. Heeft de televisie het bezoek aan vermakelijkheidsinstellingen beïnvloed? [Has television influenced the attendance at public entertainments?], Statistische en econometrische onderzoekingen van het Centraal Bureau voor de Statistiek, No. 1, 1960. p. 24-43. (English summary).

Analysis of changes in attendance of cinema theatre, concerts, sports events and increase of TV sets between 1957 and 1958 in the Netherlands. Highly significant influence of television on cinema attendance - each new set reduced cinema attendance by at least 20 visits a year. No such influence was detected on concert and sports attendance.

45. Nederland. Centraal Bureau voor de Statistiek. Schooljeugd en televisie, Herfst 1957. I. Kijkgewoonten en kijknormen; II. Invloed op schoolprestaties en belangstellingsrichting [Schoolchildren and television, Fall 1957. I. Viewing habits and viewing norms; II. Influence on school achievement and focus of interest]. Zeist, W. de Haan, 1959. Pt. I, 123 p.; Pt. II, 60 p. (English summary). (Reports of Centraal Bureau voor de Statistiek).

Purpose: to gauge (1) the penetration of TV viewing into leisure among Netherlands Youth; (2) amount of institutionalization of TV viewing in the family; (3) effects of TV viewing on school achievement.

Subjects: two-stage probability sample (1 school, 2 classes) of 14,159 children between 12 and 15 years, in several kinds of continued or secondary education.

Method: Interviews with multiple-choice questions of children and mothers. Ex post facto experiment with matched groups of TV and non-TV children.

Results: 10% of children report TV set at home, 2/3 of those without TV are regular guest viewers, 25 per cent of the TV-equipped are more or less unlimited by parental norms, 40 per cent are allowed to watch only one day a week, 35 per cent have a medium amount of parental limitation. Less than 10 per cent are allowed all sorts of programmes. The higher the educational level the less the average amount of TV viewing. Social class shows no marked association with TV viewing, when the educational level is controlled. The older the pupil the more he watches and the less the parental control. Catholic children report a higher average of viewing than Protestants. TV viewing (entertainment) had no significant effect on school achievement, the higher percentage of TV equipped pupils repeating a class probably being due to other features of the respective families. A five-point scale of relative preference for educational versus entertainment programmes showed positive correlation with amount of viewing, age, preference of the mother; negative with mother's educational level, father's occupation.

46. Nederland. Centraal Bureau voor de Statistiek. Leeftijd en vrije tijdsbesteding [Age and leisure activities] Zeist, W. de Haan, 1959. 51 p. (English summary). (Report No. 10 of Vrije tijdsbesteding in Nederland).

Based on an interview survey of a national sample of 10,500 persons over age 12 (3,246 from 12-23) in autumn 1955 and winter 1956. Boys are more interested than girls and older men in aggressive and adventure entertainment (detectives, wild west films and books). Older persons have a more serious pattern of entertainment.

47. Nederland. Centraal Bureau voor de Statistiek. Radio en vrije tijdsbesteding [Radio and leisure activities]. Utrecht, W. de Haan, 1954. 118 p. (Report of Centraal Bureau voor de Statistiek).

Based on an interview survey in 1953 of a national sample of 4,000 persons of 18 years and older. Separate chapter on the younger generation (18-28 years): they are less at home, go more often to cinema, theatre, concert or sports events; but also have significantly higher scores for indoor activities (reading, chess, checkers, music making) than the average. Radio listening is slightly less frequent, however, though programme selection and evaluation diverge only slightly from the average.

48. Panski, Jerzy. Les enfants devant les téléviseurs - essai de reconnaissance [Children in front of the television set - a tentative exploration], Polityka, No. 4, 1960. p. 5.

Analysing 2,029 responses to a mail questionnaire, researchers at Television Warsaw concluded that children under 15 constituted about 45 per cent of the Polish viewers of television. The average number of children per set in the cities varied from 2.5 in Warsaw, to 4.7 in Wroclaw. There were more children, on the average, in television homes in the country than in the city, and more in lower-class homes than in the homes of intellectuals or workers.

49. Radiotelevisione Italiana. Servizio Opinioni. Alcune informazioni sull'ascolto dei giovani. Il pubblico della TV. Ascolto delle transmissioni serali e pomeridiane nelle zone del sud servite a partire dal 1957 [Some data on the listening habits of the young. The TV public. The audience of the afternoon and evening telecasts in those regions of the south where television service started in 1957]. Rome, 1958. (Quaderni, No. 3).

From the data obtained from a survey conducted in five regions of Italy it is possible to estimate that in 1957, at prime viewing hours, the evening programmes intended for adults were watched by at least two-thirds of the children aged 12 to 17, and by at least half of those aged 6 to 11.

50. Riley, J.W., Jr., Cantwell, F.V., and Ruthiger, Katherine. Some observations on the social effects of TV, Public Opinion Quarterly, Vol. 13, No. 2, 1949. p. 223-234.

In an industrial city in the eastern part of the United States, in 1948, these investigators interviewed the inhabitants of 278 homes with television and 278 homes without it. This gave them an opportunity to examine the media habits of 1,100 persons with TV and 1,027 persons without it. They found that children in TV homes averaged 3 hours 7 minutes daily watching television; teenagers averaged only 2 hours 33 minutes. In an attempt to find out whether television reduced children's participation in play and activities, it was discovered that approximately the same percentage of TV- and non-TV-children participated in sports, and that nearly twice as many of the TV children as of the others attended sports events.

51. Seagoe, M.V. Children's television habits and preferences, Quarterly of Film, Radio and Television, Vol. 6, No. 2, 1951. p. 143-152.

Concludes that children's television viewing time increases until age 12, and that children of lower socio-economic status view more than those of higher status. Notes a considerable reduction of radio listening and movie going as a result of the introduction of television.

52. Some considerations relative to children's attitudes and the extent of televiewing. Monthly Bulletin of the Radio and Television Culture Research Institute, Vol. 10, No. 7, 1960.

In addition to some findings reported in the summary article (Furu, p. 19) this study notes that fifth graders (about 10 or 11 years old) were found to be viewing television for a longer time than seventh graders, that boys viewed more than did girls, that children's viewing tended to decrease one year or 18 months after television was installed, and that no correlation was found between intelligence and amount of viewing.

53. Survey of preference in TV programs. Tokyo, Radio & Television Culture Research Institute, August 1962. (Monthly report).

Programmes were classified into 31 categories in terms of their specific characteristics. The respondents were selected among persons older than 10 but younger than 69, from all households with TV in Japan.

The findings of this survey, conducted in the summer of 1961, showed that news, weather forecasts, home drama, and Japanese wrestling, in that order, were the most highly preferred programmes. Children between 10 and 15 years of age preferred drama with detective, adventure, and suspicion elements. Next in order of preference came quiz games and western drama.

54. Ukawa, Katsumi. Effects of television on leisure time activities and school records of children, Study Report of Humanities Department of Kagawa University, No. 1, 1960. p. 13.

Diaries kept in 1935 by fifth-grade children in Takamatsu City showed that children with television in their homes did not reduce their outdoor playtime, their newspaper reading time but, in general, reduced their time for almost all leisure activities.

Another study, made before and after television had come into homes, showed that boys with television at home fell behind non-TV boys in grades, within a year after television came in.

55. Van Dijk, K. Radio en volksontwikkeling - Sociaal culturele aspecten van de radio-omroep /Radio and popular education - Socio-cultural aspects of radio broadcasting/. Dissertation, University of Groningen. Assen, Van Gorcum, 1953. 162 p. (English summary).

A discussion of the developing functions of popular education and modern mass media and some audience research methods is followed by results of a research project. In 1951 questionnaire survey was made of 1,100 pupils from 16 to 25 years of age in several secondary and professional schools of a city and two towns in the Netherlands on the topics of selection and appreciation of radio programmes. Listening habits are formed with age. Interests rank as follows: from quiz (most interest), sports, drama, news, regional programmes and classical music (least interest). The influence of radio decreases with higher socio-economic status.

56. Wetterling, Horst. Das Fernsehen in pädagogischen Aspekt; Bemerkungen zur Wirksamkeit, zu den Möglichkeiten und Aufgaben eines Jugendprogramms im Fernsehen /The educational aspect of television; observations on the effectiveness, the potentialities and the tasks of television programmes for young people/. München, Evangelischer Presse-Verband für Bayern, 1960. 294 p. (Schriftenreihe der Evangelischen Akademie für Rundfunk und Fernsehen, No. 9).

An evaluation of German children's and youth programmes on TV, based on a comparison of the reactions of 10 urban and 19 rural children (5-10 years) and of 10 rural and 10 urban adolescents (10-14 years), observations of 10 family heads, and reactions of variable groups totalling 350 youths.

With growing age the preference for television over other media shifted to cinema and books. Fiction, semi-documentary programmes and youth news were preferred to documentaries, discussions, demonstrations. Reflections on psychological, educational and moral functions of youth programmes.

57. Witty, Paul. Televiewing by children and youth, Elementary English, No. 38, 1961. p. 2.

For 11 years, Professor Witty has obtained a very large number of questionnaires in the Chicago area from elementary and high school pupils, their teachers and parents. In each case he has asked the children about their favourite programmes and the time they spend viewing; the parents were asked the same questions and in addition other questions relating to their attitude toward television. This is the latest annual report.

In 1950, elementary schoolchildren averaged 21 hours a week viewing television; the average rose to 24 hours in 1955, then fell again to 21 in 1961. Professor Witty's first figure for high school students is 1951 - 14 hours a week. This rose to 17 hours a week in 1953, fell again to 14 by 1961.

The 11-year parade of favourite programmes is most interesting, and calls for interpretation against a social background.

B. RELATED STUDIES OF OTHER MEDIA

58. Heisler, Florence. A comparison between those elementary schoolchildren who attend moving pictures, read comic books and listen to serial radio programmes to an excess, with those who indulge in these activities seldom or not at all, Journal of Educational Research, No. 42, 1948. p. 182-190.

The 10 per cent of students in grades 2 to 8 (ages 7 through 14) who indulged least in movies, comics, and radio were compared with the 10 per cent who indulged the most. Tested by standardized tests, no significant differences were found between their school achievement or their personality adjustment.

59. Keilhacker, Margarete. Zwei Hauptmotive des Filmbesuchs der Fünfzehn bis Achtzehnjahrigen /The two main reasons for cinema attendance of adolescents between the ages of 15 and 18/, Jugend, Film, Fernsehen, No. 2, 1958. 14 p.

Based on written materials obtained from 3,000 adolescents, and on other studies of the same topic, the authors conclude that the two main reasons why adolescents go to the cinema are the desire to escape from everyday life, and the desire to get to know real life better. These motives are interlocked, and are not to be interpreted in adult terms. For example, some adults who go to movies for "escape" behave passively; they expect to be entertained but not involved. Children, on the other hand, expect a film to "grip and excite them"; they must feel personally involved.

60. Kobylanski, Wladyslaw. La presse et la jeunesse /The press and youth/, Nowa Kultura, No. 11, 1960. p. 1-11.

A survey of Polish youth averaging between 16 and 17 years of age showed that these young people were more interested in humour and satire in the newspaper than any other content. (Second place: games and recreation. Third: foreign news and sports). Boys were much more interested in sports, technical subjects, and politics; girls much more in stories of cultural life, fashions, stories and novels, and games and recreation. The authors analysed this period as one in which the influence of the family diminishes, youth protests against the norms of the older generation, and becomes more and more interested in the world around him and in his own individuality. In this period, says the author, the conscience of the young is coming more and more to be formed by press, radio, and television.

61. Lacis, A. and Kejlina, I. Deti i kino /Children and the cinema/. Moscow, General Directorate of Social Education, People's Commissariat of Instruction of the RSFSR, 1928. 85 p.

From the viewpoint of television, the most pertinent material in this monograph describes the "cinematomania", or collective infatuation with the movies, observed in a study of 2,000 children in Moscow. One of the conclusions is that children may be dangerously influenced by films intended for older age levels.

62. Lyness, Paul I. The place of the mass media in the lives of boys and girls, Journalism Quarterly, Vol. 29, No. 1, 1952. p. 43-54.

This study was made in 1951, before television came to Des Moines, Iowa. It is based on questionnaires on the media behaviour of 1,418 Des Moines children in grades three, five, seven, nine, and eleven. Radio was found to be the favourite medium of these children, the one they would keep if they had to give up all media except one. The majority named radio as their favourite source of news, and considered it more reliable than newspapers.

63. McIntosh, Douglas M. Attendance of schoolchildren at the cinema. Glasgow Scottish Educational Film Association, 1949. 15 p. (Research Publications, No. 1).

In view of recent findings about social class differences in children's reactions to television, it is interesting to note in this report that films seem to appeal more to Scottish children from poor homes than to those from better homes.

64. Radio in the children's life, Monthly Bulletin of the Radio and Television Culture Research Institute, Vol. 8, Nos. 8 and 10, 1958.

Research conducted in 1957 found that with third and fifth-grade students (about 9 and 11 years old) the heavy listening group (3 hours or more a day) tended to be higher than the low listening group (30 minutes or less a day) in intelligence, reading ability, and scholastic achievement in social studies and science. With eighth graders (14 years old), the situation was different. Here in the case of boys the heavy listeners scored lower than the medium listeners on all the tests mentioned above.

Third and fifth-grade children who listened to both serious and light programmes were higher than either the serious or the light listeners in intelligence, reading ability, and science and social studies achievement. In the eighth grade, however, the children who listened mainly to serious programmes were better in social studies, science, and English language.

65. Schramm, Wilbur, Lyle, Jack, and Parker Edwin B. Patterns in children's reading of newspapers, Journalism Quarterly, Vol. 37, No. 1, 1960. p. 35-40.

This article is a by-product of the studies which resulted in Television in the lives of our children. The newspaper is the last of the media to come into real use by children. Comic strip reading reaches its height about the fourth grade, and thereafter decreases. There is little general reading of the paper until about the sixth grade, and not much daily reading until the eighth grade. During the teen years, the importance of the newspaper rises steadily, and the brighter children, in particular, come to value it highly.

66. Shuttleworth, F.K. and May, Mark A. The social conduct and attitudes of movie fans. New York, Macmillan, 1933. 142 p.

By comparing a large group of children who attended the cinema several times a week with another group who went only twice a month, the investigators found that the frequent movie-goers were emotionally less stable, less co-operative, poorer students in school, but were more apt to be cited by their fellows as "best friends". Between the two groups no difference was found in honesty, obedience, or moral consciousness. The frequent movie-goers were more likely than the others to admire cowboys, popular actors and ballet girls; to believe that socially undesirable conditions like alcoholism exist; to believe that good clothes are important; to object more to parental control; and to go more often to dance parties. The authors do not contend that all these differences can be attributed to movie-going. A Payne Fund study.

67. Ward, J.C. Children and the cinema. An inquiry made by the Social Survey in October 1948 for a Departmental Committee appointed by the Home Secretary, the Secretary of State for Scotland and the Minister of Education. London, Central Office of Information, 1949. 100 p. (mimeo).

These investigators found, as many others have, that the children who visit the cinema most frequently come from the lower income groups, and usually have less than average interest in other activities. There are some indications that these frequent movie-goers find their own lives uninteresting and look to films for adventure and excitement; and also that they tend to seek a "romantic" and unrealistic occupation.

IV. LEARNING FROM TELEVISION AND FILM*

A. TELEVISION

68. Barrow, Lionel C. and Westley, Bruce H. Exploring the news: an experiment on the relative effectiveness of radio and TV versions of a children's news programme. In: Schramm, W. ed. The impact of educational television. Urbana, Ill., University of Illinois Press, 1960. p. 143-150.

Public schoolchildren remembered facts from the television version more significantly than from the radio version of the newscast.

69. Carpenter, C.R. Approaches to promising areas in the field of instructional television. In: Institute for Communication Research. New teaching aids for the American classroom. Stanford, Ca., 1960. p. 73-94.

Before suggesting needed research, Carpenter sums up the state of research on instructional television by answering eight questions:

1. Can teaching by television be done? Unequivocally yes.
2. How can it be done? In a great variety of ways, which he proceeds to specify. One is with all grades and classes.
3. What are the effects of teaching by television as compared to a wide range of comparable conventional arrangements? Generally "no significant differences" have been found. The differences plus or minus from this generalization are not worth arguing about.
4. What are the economy and cost of facilities factors? A good deal of this information is at hand.
5. Does the arrangement of having the "best" teachers instruct over television improve the quality of teaching? Generally yes, but even superior teachers need special help and preparation for television.
6. Can television be used to provide instruction to students who might not otherwise be taught? Yes, especially to rural students.
7. Can television be used to provide appropriate educational programmes for dispersed adult populations including professional groups? Yes, this has been demonstrated most impressively.
8. Can television be used to consolidate and combine educational resources of a section, state, or region? This, too, has been successfully demonstrated.

A list of 36 selected titles accompanies the article.

(Reproduced with authors' permission from Television in the Lives of Our Children.)

70. Duggan, E.P. Children at the television set; habits of a group, Times Educational Supplement, No. 2112, November 1955. p. 1165.

The Times reports that a study of children in an English boys' school showed that non-viewers of television did better than viewers in school examinations, but less well on general knowledge tests.

71. Dunham, Franklin. Effect of television on school achievement of children, School Life, No. 34, 1952. p. 88-89.

Reports a survey of almost 1,000 sixth and seventh graders (11 to 13 year olds) in Cincinnati, Ohio, which could find no generally significant difference between school performance of children with and without television.

72. Evans, C.C. Television for the pre-school child, Elementary English, No. 32, 1955. p. 541-542.

Mr. Evans concluded, after observing the reactions of 40 kindergarten and 22 nursery shoolchildren to television, that the most obvious effect was to increase their vocabularies.

73. Greenstein, Jack. Effects of television upon elementary school grades, Journal of Educational Research, No. 48, 1954. p. 161-176.

No evidence was found that school grades of 67 American sixth-grade children were affected by television viewing.

74. Heimann, Paul, Jorswiek, Eduard, Ledig, Hans-Manfred and Foerster, Oskar. Jugend und Fernsehen /Youth and Television/. München, Juventa Verlag, 1958. 116 p.

An analysis of education aspects of the German television programme for children and youth. Methods: Group discussions, questionnaires and an analysis of the programme contents were employed. It was found that the programmes for the youth contains more informative topics than do those devoted to entertainment. The authors interpret this fact as positive and favourable to television. On the other hand, in shaping the programme there is insufficient understanding of the psychology of the various ages. As regards the contents and formal shaping there is uncertainty; often the transmissions contain too much factual detail. Recommendations are given for designing an educationally and psychologically satisfying programme.

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*All the general studies listed in section II also treat this subject. See especially 10, p. 221-312; and 12, p. 75-97.

75. Ishida, Yuko and Shimaoka, Hisako. Children and television. Report. Osaka, Osaka Municipal University, Department of Home Economics, n.d.

A questionnaire and an examination of sixth-grade students' marks indicated a relation between lower grades and heavy viewing of television.

76. Japan. Ministry of Education. Effect of television on children and young people, Survey conducted in 1958. Tokyo, 1959. 27 p. (mimeo).

Questionnaires from television-owning parents of children at all levels from kindergarten to high school indicate that most parents feel that television has made no difference in their children's school achievement. However, 18 to 30 per cent (depending on the school level) feel that their children have done better in social studies and science since the family got television.

77. Kumata, Hideya. A decade of teaching by television. In: Schramm, W. ed. The impact of educational television. Urbana, Ill., University of Illinois Press, 1960. p. 176-192.

This article brings up to date Kumata's earlier summary, An inventory of instruction television research (Ann Arbor: Educational Television and Radio Centre, 1956). Lists 121 research titles and sums up the present position. Kumata's general conclusions are as follows:

1. The mode of presentation, TV or face-to-face, apparently has little effect on how much knowledge is retained by the audience.
2. Motivation is a prime variable in determining how much is retained. Voluntary classes usually learn more than captive audiences.
3. Adequate and skilful preparation of subject matter and integration into a teaching process are prime factors. This may be one reason why superiority of TV is reported more often at elementary than at higher levels.
4. Television seems to affect different intelligence levels differently, but the pattern is not quite understood as yet.
5. Interaction is an important factor. If a television audience has talk-back facilities, this serves at least as a partial substitute for face-to-face interaction.
6. Attitudes toward TV are not related to amount of learning, but are related to the student's likelihood of taking another class by TV.

(Reproduced with permission from Television in the Lives of Our Children.)

78. Maccoby, Eleanor. The effects of television on children. In: Schramm, Wilbur, ed. The science of human communication, New York, Basic Books, 1963. p. 116-127.

Reviews late studies and concludes: "There is reason to believe that children's attitudes and beliefs can be shaped by what they see on television, and that emotions and impulses are aroused in the child viewer to match those portrayed by screen characters ... /Children also use television/ as one of the sources from which they draw material for organizing and interpreting their experiences. They also use it to prepare themselves for their future lives as students, as marriage partners, as members of a professional or occupational group ... There can no longer be much doubt that television does constitute an important source of influence on children and as such is a legitimate object of public concern and public action."

79. Maccoby, Eleanor E. Statement. In: U.S. Senate. Committee on the Judiciary. Juvenile delinquency (Television programmes). Hearings before a sub-committee of the Committee on the Judiciary, U.S. Senate, 84th Congress, First Session, pursuant to Res. 62, a resolution to investigate juvenile delinquency in the United States, 6-7 April 1955. Washington, U.S. Government Printing Office, 1955. p. 4-23.

Mrs. Maccoby told the committee there was no doubt that children learn from television. They learn such things as what to wear, and how to act on certain occasions. There is also good reason to think that under certain conditions they may learn aggressive behaviour. She questioned the idea that a child can discharge his aggressive feelings by viewing violence on television. "I expect ... that we shall find," she said, "that aggressive feelings are sometimes increased rather than reduced by aggressive scenes on television or in the movies."

80. Schramm, Wilbur. Television in the life of the child - implications for the school. In: Institute for Communication Research, New teaching aids for the American classroom. Stanford, Ca., 1960. p. 50-70.

Drawing on field research, the author concludes that home television is likely to produce students who come to school with larger vocabularies than pre-television children, and have a wider knowledge of their environment. These students are introduced abnormally early to adult problems, have learned something about how to learn from television and film, need help in finding the more intellectually rewarding aspects of television. They are accustomed to smooth and exciting performances on television and will expect high standards of performance from their classroom teachers.

81. Schramm, Wilbur. What we know about learning from instructional television. In: Educational television: the next ten years. Stanford, Ca., Institute for Communication Research, 1962. p. 52-76.

Reviews 393 experimental comparisons of instructional television with classroom teaching. In 65 per cent of these experiments there was no difference in the amount of learning; in 14 per cent, the classroom students learned more, and in 21 per cent, the television students learned more. (Learning was measured by the usual final examination for the course, or by standardized tests, or both.) A higher percentage of the comparisons were favourable to television in the elementary school than in higher schools, and the results in teaching mathematics and science and social studies by television were better than the results in teaching the humanities. Language skills were taught more effectively than humanities, but less so than science and mathematics. Student attitudes toward instructional television were quite favourable in the early grades, but less favourable in high school, and still less so in college. Teacher attitudes were parallel to those of students, but in general the more teachers worked with instructional television the more they liked it.

82. Schramm, Wilbur, Lyle, Jack, and Parker, Edwin B. Learning from television, Studies in Public Communication, No. 3, 1961. p. 86-98.

Evidence that first-grade children in a Canadian town with television have larger vocabularies than comparable children in a Canadian town without television. By the time children reach the sixth grade, however, no such difference remains. In fact, at that level, there is evidence that children in television homes know less about public affairs than do non-television children. Television children in the sixth grade know more than non-television children about entertainment personalities. There is no difference in what the two groups of children know about science. The implication is that children benefit from television in certain kinds of knowledge (e.g. early knowledge of vocabulary and, later, knowledge in such matters as entertainment which television emphasizes), but may be at a disadvantage in learning about public affairs (which they seem to learn more often from the printed media), and to be neither at a disadvantage nor an advantage with respect to learning of science (which they learn chiefly in school).

83. Scott, L.F. Television and school achievement, Phi Delta Kappan, No. 38, 1956. p. 25-28.

Heavy viewers were compared with light viewers of television among 456 sixth- and seventh-grade children in California (11 to 13 years old). Light viewers scored significantly higher than heavy viewers on total achievement, and particularly on achievement tests in arithmetic and reading. Intelligence and social class were not controlled, however. Light viewers had higher I.Q.'s, and came from families with higher socio-economic status.

84. Tarroni, Evelina. Problemi educativi della TV /Educational problems of TV/. Inquiry conducted by the Centro Italiano Femminile, on the subject of television and children. Rome, C.I.F., 1957. 44 p.

The author describes a questionnaire inquiry carried out in northern and central Italy, among children, teachers, and mothers. Mothers and teachers report an awakening of interests in the child who watches television, stimulation of curiosity about new things, and a heightened level of general knowledge. Attention is called to a widespread ignorance of and indifference toward TV on the part of teachers. The author emphasizes the power of television as an educational tool, and the need for children's television programmes to take greater account of school curricula, and for teachers to learn more about television and take greater advantage of its cultural and educational values.

B. RELATED STUDIES OF FILM

85. Albertini, Laura and Caruso, Ada P. Percezione ed interpretazione di imagini cinematografiche nei ragazzi /Perception and interpretation of film images by children/, Bianco e Nero, No. 10, 1949. p. 9-27.

These investigators studied the reactions of 576 children, age 8 to age 14, to one film. Among their findings, the most pertinent to television was the discovery of a very large number of observational errors, and the often wide discrepancy between what the children thought they had seen and what actually occurred in the film. The authors felt that the rapid succession of pictures, events, and sounds made it difficult for the children to see and remember sizes and likenesses, geometric forms, and positions of persons in relation to known objects, and movements and attitudes. Comparing the older with the younger among their subjects, the authors saw little sign that these difficulties lessened proportionally with age. The implication is that a relatively small proportion of the detailed information in a picture (and perhaps also in television?) is perceived and remembered sharply and accurately.

86. Holaday, Perry W. and Stoddard George D. Getting ideas from the movies. New York, Macmillan, 1933.

In this Payne Fund study, an effort was made to find out how much and what kind of information children remember from a film. It was found that children 8 years old remember 3 out of 5 facts which an adult remembers after seeing a film; children 11 or 12 remember 3 out of 4 facts an adult recalls; children 15 or 16 remember 9 out of 10 facts an adult remembers. Children retain a large proportion of these for many weeks after seeing a film. Scenes of conflict, high emotion, and familiar surroundings are most likely to be remembered. Children of all ages tend to accept what they see in a movie as "fact". Young children fail to understand some of the things they see, and retain distorted or misunderstood images.

87. Paulsen, Käthe. Was bleibt? Kinder besinnen sich auf einem Film [What remains? Children recall a film], Film-Bild-Ton, No. 7, 1957. p. 8-13.

Twenty-two months after the showing of a film to 28 11-year-old children in Hamburg, nearly 60 per cent of the children reproduced the plot fully, and on the whole, the main points of the film were better reproduced than directly after the children saw the film. Adults given a similar test remembered less than the children did.

88. Zochbauer, Franz. Von neuen Gottern. Zur Problematik des Starkultes [New gods. Problems of film-star cults], Jugend und Film, No. 1, 1958. 12 p.

Over 70 per cent of 4,000 children who responded to questionnaires in Salzburg reported that they had in some way modelled their manners and attitudes on those of a film star. Notably the stars have furnished standards of preference among consumer goods. Seventy-nine per cent of the respondents said that the movies had taught them to dress better, and 51 per cent reported that they had learned from the movies "how to act when in love".

V. PSYCHOLOGICAL EFFECTS - IN GENERAL

A. TELEVISION*

89. Foundation for Character Education. Television for children. Boston, 195/-. 56 p.

A panel of psychologists, educators, critics, and broadcasters analysed the probable effect of television on children, on the basis of their own experience and the research with which they were familiar. They could find little or no effect on eyesight or general health, on school grades, reading books, or amount of library use. The most definite effect they noted was on the child's distribution of time. Because so much time is spent watching television, the child tends to reduce his playtime and the amount of time he spends with other children; he is also likely to spend a larger proportion of his time at home. The effect of television on character development, moral behaviour, fears, and aggression, they said, must be considered to be unknown.

90. Lazarsfeld, Paul F. Why is so little known about the effects of television on children and what can be done? Testimony before the Kefauver Committee on Juvenile Delinquency, Public Opinion Quarterly, Vol. 19, No. 3, 1955. p. 243-251.

The dean of American communication research scholars speaks of the advantages to be gained by more knowledge of television and its effects, and urges more co-ordination in the planning of research. He suggests four types of "unorthodox" research - experiments in making "good" programmes rather than analysing bad ones, studies of the cumulative rather than the immediate effects of television, studies of how the average family can create an atmosphere which will compete with television, and studies of how the decisions are made to put given programmes on the air and, consequently, of the points at which influence can be exerted if a change is desired.

91. Maccoby, Eleanor E. Why do children watch television? Public Opinion Quarterly, Vol. 18, No. 3, 1954. p. 239-244.

After interviewing 379 mothers of five- and six-year old children, Mrs. Maccoby concluded that a child's interest in television could be studied as a symptom of a need for vicarious satisfaction when the child is frustrated in his attempts to achieve satisfaction in real life. The child often finds it easier to obtain this satisfaction through fantasy in television than to obtain it through his social relationships. As evidence of this she found that upper middle class children who were highly restricted in their home lives (and consequently frustrated) spend more time viewing television than do children of the same social class who are not so frustrated. This same result was not found in children of the upper lower class. The difference was explained in terms of the different class norms. In the absence of frustration, middle class children are drawn away from spending long periods watching television. In the lower class, however, there is a great deal of television viewing on the part of the whole family, with or without frustration. Thus a child of this class who is frustrated in his home life could not readily view much more television than he normally does; nor would he gain the satisfaction of rebelling against the family norm by watching more television, because the family usually does not disapprove.

92. Parker, Everett. Parents, children, and television. New York, National Council of Churches, 1954.

A survey of 3,559 homes in New Haven, Connecticut, showed that 69 per cent of parents in general approved of children's programmes as they were at that time, and only 26 per cent on the whole disapproved of them. The percentage of disapproval was higher among better educated parents and the parents of small children.

93. Pearlin, Leonard I. Social and personal stress and escape television viewing, Public Opinion Quarterly, Vol. 23, No. 2, 1959. p. 255-259.

The investigator interviewed 736 television owners in an industrial city in the United States, and classified them according to whether they showed more than normal amount of "stress", and whether they viewed more than the usual number of "escape" programmes on television as compared with the number of "reality" programmes they viewed. It was found that the individuals who showed more than an average amount of stress also tended to view a higher-than-usual proportion of escape programmes.

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*This topic is treated at length also in the general studies listed in Section II. See especially 12, p. 57-74 and 98-168; and 11, passim.

94. Pool, Ithiel de Sola. Free discussion and public taste, Public Opinion Quarterly, Vol. 24, No. 1, 1960. p. 19-23.

This was presented as testimony before the Federal Communications Commission on 11 December 1959. Citing the Himmelweit finding that children in England came to like "good cultural programmes" which they would not have selected if there were a choice for them, and which they tried because they had no alternative, the author states that "if the situation is reciprocal, then we may guess that at times when only poor programming is available on the air people will watch it for lack of something better to do, and in so doing they may develop bad taste habits. If the Himmelweit finding can be generalized, then when there is a choice of programme levels people will pick programmes at their own level, and the presence of a poor programme among those available will do little or no harm, for it will not be chosen by viewers whom it would change".

95. Ten Have, T.T. and Vastenhouw, M. Groepsgesprekken over televisie in een zestal dorpen /Group discussions on television in six villages/. Groningen, J.B. Wolters, 1957. 166 p. (Paedagogische Monografieën, No. 7).

A 1955 pilot study, by means of group discussions, of reactions to the introduction of television in six Dutch villages contains a chapter on influences on family life and educational functions.

B. RELATED STUDIES OF OTHER MEDIA

96. Accra and Kumasi. Department of Social Welfare and Community Development. Children and the cinema: a report of an inquiry into cinema-going among juveniles undertaken by the Department of Social Welfare and Community Development in Accra and Kumasi. Accra (Ghana), 1954.

A study of the behaviour of children between 8 and 16, in Accra and Kumasi, who attend the movies between noon and 3 p.m., and in order to do so sometimes miss school, and beg or steal the money for admission to the theatre. Most of these children do not understand the film dialogue and thus experience the film only as a visual experience. The authors feel that one of the most dangerous aspects of their behaviour is that they are attending these films secretly, against the wishes of their parents. Thus by partaking of "forbidden fruit" they are building up an addiction for it.

97. Allwood, Martin S. The impact of the comics on a European country. Mullsjo (Sweden), Institutet fyra Samhallsforskning /Institute for Social Research/, 1956.

Based on questionnaires filled out by 649 persons in Sweden, 74 per cent of whom were over 18, the author concludes that 32 per cent do not read newspaper comics and 72 per cent do not read comic books. Manual workers and their children are more likely than white-collar workers and their children to be interested in comics. Heavy comic reading goes with frequent movie attendance. Concerning effects, the author says: "The effect of comics ... is peripheral to the personality. The security or insecurity of the personality depends on quite different things, and above all on the kind of human relations developed in the home, with father, mother, brothers, and sisters".

98. Bellingroth, Friedhelm. Triebwirkung des Films auf Jugendliche - Einführung in die analytische Filmpsychologie auf Grund experimentaller Analysen kollektiver Triebprozesse im Filmerleben /Influence of the cinema on the instinctual life of young people. An introduction to the analytical psychology of the cinema on the basis of the experimental analysis of collective group reactions to films/. Bern-Stuttgart, Verlag Hans Huber, 1958. 154 p.

Before and after study of groups of about 110 schoolboys and students between the ages of 10 and 19 (totalling 1,105 persons seeing 10 regular story films of different kinds), by means of Szondi tests and Szondi-factural analysis, to estimate unconscious effects of films on fundamental drive structure.

Conclusions: Films with different action patterns have a clearly different effect on drive structures. Viewers with different personalities have clearly different reactions. Gives a warning against premature generalizations on THE effects of THE film, or THE effects of THE Western on THE young.

99. Blumer, Herbert. Movies and conduct. New York, Macmillan, 1933. 257 p.

This Payne Fund volume is based on "motion picture autobiographies" obtained from 1,823 young Americans of high school age and up. Very large proportions of the autobiographies mentioned these kinds of conduct, among others, as having resulted from seeing films:

1. Re-enacting film stories, or playing the part of a film hero or heroine. (Re-enactment of love scenes was common among girls, and boys tended to prefer scenes of fighting, shooting, cowboy and Indian episodes, crime and pursuit.)

2. Daydreaming about motion pictures and actors and actresses. (More than half of the respondents admitted daydreaming on topics related to films.)

3. Imitating the clothing styles, hair styles, and personal mannerisms of film stars.

4. Being frightened by films; (93 per cent of the children below high school age, and 61 per cent of high school students said they had had this experience. Yet many of them like movies that frighten them).

100. Dysinger, Wendell S. and Ruckmick, C.A. The emotional responses of children to the motion picture situation. New York. Macmillan, 1933. 122 p.

Using galvanometre and pneumocardiograph to indicate emotional reactions, the authors of this Payne Fund study studied the reactions of 150 children and young people to a variety of scenes of conflict, violence, and erotism in film. The scenes of danger, conflict, and tragedy had the greatest effect on children 6 to 12; on teen-age children the effect was much less, and was weakest in subjects 20 or over. On the other hand, love scenes have the greatest emotional effect on the teen-agers, and the least effect on the children 12 and under.

101. Funk, Alois. Film und Jugend. Eine Untersuchung über die psychischen Wirkungen des Films im Leben der Jugendlichen [The cinema and youth. An examination of the psychological effect of the cinema on the life of young people]. München, Ernst Reinhardt, 1934. 174 p.

Three questionnaires were filled out - 2,625 by young people 14 to 18 who were asked about their experiences with *entertainment films*; 425 by young adults over 18 on how they felt the film had influenced them; and 235 by educators who were asked their opinions of the influence of films. The chief conclusion is that a viewer's identification with one of the leading characters is very important in determining the influence of a film.

102. Gerhartz-Franck, Ingrid. Ueber Geschehensgestaltungen in der Auffassung von Filmen durch Kinder [Perception psychology applied to the comprehension of films by children]. Leipzig, J.A. Barth, 1955. 124 p. (Schriftenreihe zur Entwicklungspsychologie, No. 3).

Experimental investigation on the subject, how children from 6 to 14 years of age experience film performances, how much they understand and how they inwardly digest it. Films were shown to the children and they were then asked to relate the contents. With the children 6 to 7 years old, only a summary conception was retained. Only at the age of 13 and 14 did a conception of the nature of the event shown in the film begin to develop, and an understanding of the sense and structure of the film.

103. Gray, Barbara. The social effects of the film, Sociological Review, Vol. 42, No. 7, 1950. p. 12.

On the basis of a survey of 300 children in West Bromwich, the author concludes that there is no evident relation between juvenile delinquency and film attendance, and that films do not appear to decrease children's respect for parents. She stated, however, that the idealized portrayal of luxury, and the representation of love chiefly as physical attraction endangers the sense of values of young and immature cinema-goers.

104. Keilhacker, Martin and Keilhacker, Margarete. Jugend und Spielfilm. Erlebnisweisen und Einflusse [Youth and the story film. How young people experience films and are influenced by them]. Stuttgart, Ernst Klett Verlag, 1953. 128 p.

This is a summary volume, carrying many of the conclusions from the Keilhackers' long study of children and films. They describe the different reactions of children at various ages and various stages of sexual and social development, how children relate a film to their own lives, the occasions of identification and escape, the standards of judgement they apply, and the difficulties they have with film language. The central theme of the book is the influence of films on the "inner lives" of children and youth.

105. Keilhacker, Martin, Brudny, Wolfgang, and Lammers, Paul. Kinder sehen Filme. [Children see films]. Munich, Ehrenwirth Verlag, 1957. 168 p.

Following Keilhacker's observation that seeing a film is a much more real experience than hearing a story, reading a book, or listening to the radio, the other two authors conducted research by means of infra-red photographs of children watching movies. Brudny concludes that children of 3 to 4 years seem to experience little contact with the film, and that children 5 to 7 likewise show comparatively little evidence of understanding. Children between 8 and 11, however, react actively and with understanding, and the pictures furnish hints as to their perceptions and identifications.

106. Le Moal, P. and Faugère, M.M. Le cinéma et l'enfant [The cinema and the child]. La sauvegarde de l'enfance, Vol. 2, Nos. 15-16, 1947. p. 66-77.

Questionnaires filled out by 1,163 children between the ages of 10 and 16 revealed, among other things, that 51 per cent of the boys and 59 per cent of the girls sometimes dreamed about the films they saw. Considerable differences were found in the reactions of children from religious and those from non-religious homes. A larger proportion of the children from "religious" homes than others were affected by "immoral" and violent scenes.

107. Leroy-Boussion, A. Etude du comportement émotionnel enfantin au cours de la projection d'un film comique [Study of the emotional behaviour of children during the projection of a comic film], Revue internationale de filmologie, No. 5, 1954. p. 103-123.

This is a study of the behaviour of 222 children between 4 and 14 years of age, during the showing of a comic film, in Marseilles. The older children laughed more. Boys reached the "laugh ceiling" at an earlier age than girls. Town children laughed oftener than suburban children. Brighter children understood the film better, but the frequency of laughing did not always increase with intelligence, because other characteristics of temperament and family background also influenced the tendency to laugh.

108. Leroy-Boussion, A. Le jeune spectateur et son entourage [The young spectator and his entourage], Enfance, No. 4, 1954. p. 293-316.

This investigator observed closely the behaviour of one child in each of 222 showings of the same film. He noted about one "social" reaction for approximately every eight "solitary" reactions. Only 52 of 1,080 "social" reactions seemed to indicate a lack of interest in the film. The others were the child trying to make contact with his friends or with other members of the audience present in order to share his enjoyment of the film or to seek reassurance when frightened or shocked by a scene. The investigator concludes that a child is seldom so absorbed in a film that he forgets the people watching the film with him.

109. Maccoby, Eleanor E. and Wilson, William C. Identification and observational learning from films, Journal of Abnormal and Social Psychology, Vol. 55, No. 1, 1957. p. 76-87.

Seventh grade children (about 12 or 13 years old) were shown a film and tested a week later on what they remembered from it. It was found that the boys identified with the hero, and the girls with the heroine, and tended to remember somewhat better the words and actions of the character with whom they identified. When there was a class difference in characters, a child tended to identify with the character who belongs to the class to which the child aspires - not necessarily the one to which he belongs. What is remembered from the character identified with, however, is affected by the relevance of his actions to the felt needs of the child. Boys remembered aggressive content better than girls, provided that the boys' hero is the aggressor. Girls remembered incidents of boy-girl interaction better than boys did, if the girl's heroine was the agent of the action.

110. Maccoby, Eleanor E, Wilson, William C., and Burton, R. V. Differential movie-viewing behaviour of male and female viewers, Journal of Personality, No. 26, 1958. p. 259-267.

In this experiment, eye-movements of 24 male and 24 female college students were observed as the students watched scenes of films in which only the hero and heroine of the picture were on stage. It was found that young men spent more time than did women watching the hero, and young women spent more time than did men watching the heroine. This appears to support the hypothesis (see Maccoby and Wilson) that young people watching films or television tend to identify with the leading character of the same sex.

111. Mayer, Jacob P. British cinemas and their audiences; sociological studies. London, Dennis Dobson, 1948. 280 p.

The part of this book which is most pertinent to later television research reports detailed statements from 60 persons (three-quarters of them under 25) about their experiences and reactions as moviegoers. Nearly 66 per cent reported that a film at some time had caused them fright or nightmares. A still larger percentage said that they had sometimes felt so involved in a film that it was like passing through a personal experience.

112. Perron, Roger. Essai de mise en relation de certains types de contenus filmiques et des réactions des spectateurs enfants. [Study of the relationship between certain kinds of film sequences and the reactions of juvenile spectators]. Paper read at the second International Congress of Filmology, Paris, 1955.

This has significance in view of the often stated charge that children observe films and television "passively". Children's motor, verbal, and nonverbal sound reactions to nine different film sequences were recorded. Not only were there a great many such reactions, but 60 to 80 per cent of the children consistently reacted the same way to the same type of film content. Many of these reactions were classified as "active participation", and many others as "emotional participation". On the basis of these results, it is concluded that these children's reaction to the film was not passive.

113. Peterson, Ruth C. and Thurstone, Louis L. Motion pictures and the social attitudes of children. New York, Macmillan, 1933. 75 p.

This is another of the Payne Fund studies. By means of tests before and after the showing of 13 films to 4,000 high school students, these investigators established conclusively that movies can change the attitudes of children toward social issues. Among the strongest changes were those achieved in attitudes toward the Chinese people by the film "Son of the Gods", toward Negroes (by the film "Birth of a Nation"), toward war (by the film "All Quiet on the Western Front"), and toward prevailing systems of punishment of criminals (by the film "The Criminal Code"). By measuring the effects of several films on common subjects, these authors demonstrated a cumulative effect of films, and by testing children at intervals of time up to 19 months they found that attitudes produced by films were lasting.

114. Sicker, Albert. Kind und Film. Der Einfluss des Filmes auf das Seelenleben des Kindes. Eine experimentelle Studie unter Verwendung des Pigem und des Tuanimatestes /Child and film. The influence of films on the emotional life of the child. An experimental study, using the Pigem and Tuanima tests/. Bern, Stuttgart, Verlag Hans Huber, 1956. 143 p.

A discussion of attendance and preference ratios in several countries is followed by an evaluation of methods used by several effect studies (observation, wiggle test, questionnaires, interviews). A replicable experimental design is chosen, not merely relying on observation and introspection, but also using projective tests. After some experimentation, a before and after design with seven questions, Pigem test and Tuanima test a film on Hansel and Gretel was chosen, using as control another film and a normal school hour. Subjects were 396 children, aged 9 to 16, of several European nationalities, studied by group tests in school demonstration rooms.

Conclusions: (1) Confirmations - The child experiences the film in the child's world of reference; its reaction is strongly emotional; it adheres to the side of the Good; it does apprehend the film as real; undesirable qualities of the child are enhanced if frequently shown in the film; the same film is experienced differently by each child. (2) Refutations - Film as such does not enhance superficiality; film as such does not create illusions, this depends on film content; film does not eliminate "the inner eye"; film as such does not stimulate aggressiveness and crime. (3) Some generalized propositions on strength and direction of influences.

115. Stuckrath, Fritz. Der Film als Erziehungsmacht /The film as an educational force/. Hamburg, Verlag der Gesellschaft der Freunde des vaterländischen Schul- und Erziehungswesens, 1953. 72 p. ('Zur Hamburger Schulreform' series, No. 10).

Professor Stückrath sums up his impressions derived from years of observing children's reactions to films. The strength of the emotional effect of films on children is emphasized, and the author concludes that violent and erotic scenes may often have undesirable effects on children. The problems of identification and escape are also highly important in a child's use of films.

116. Stuckrath, Fritz and Schottmayer, Georg. Psychologie des Filmerlebens in Kindheit und Jugend /Psychology of film experience in children and youth/. Hamburg, Verlag der Schroppschen Lehrmittelanstalt, 1955. 172 p.

Three age levels of film experiences are identified in children by means of TAT tests on Hamburg children 4 to 18 years of age. Age 6 is about the middle point of a period in which most reactions to a film are emotional. Seeing too many films at that time may endanger the health of emotional development because the film contents will probably not correspond to the child's emotional level. Age 12 is at the middle point of a second level of experience. This is a time when the child is building vital relationships with his peers and with the outside world in general. The child of this age is strongly attracted by the cinema, and may attend either to compensate for failures and escape from conflict or to seek peer group company. At this age, suitable films can stimulate the child's vitality and make for healthy personal relationships; unsuitable films may contribute to anti-social behaviour. With the beginning of adolescence, the child feels a growing desire to assert his own personality. His cinema experience now begins to resemble that of adults. Escapism and identification are common. He often imitates the behaviour and adopts the ideas of film favourites. His film experience is closely related to his sexual and social development. At this period the screen can help him to rid himself of tensions, or it may contribute to increased tensions, and possibly to anti-social or criminal behaviour.

117. Wall, W.D. and Smith, E.M. Les adolescents et le cinéma /Adolescents and the cinema/, Revue internationale de filmologie, Vol. 2 No. 6, 1951. p. 153-158.

Studying the movie habits and tastes of more than 5,000 children in Birmingham, these authors found that nearly half of them had seen films not suitable for their age, and that only one-fifth of all the films they had seen in the test period had been passed by the censor for adolescents. The enthusiasm of these children for a given film seems often to be determined by the extent to which they can identify themselves with the chief characters. The scenes most likely to be shocking or frightening to young children are those involving violence, cruelty to animals, or tragedy. Asked about the influences of the cinema they observe in their friends, these boys and girls express the opinion that styles in clothing, and games and play patterns, are easily learned from movies.

118. Wetterling, Horst. Das Fernsehen in pädagogischen Aspekt; Bemerkungen zur Wirksamkeit, zu den Möglichkeiten und Aufgaben eines Jugendprogramms im Fernsehen /The educational aspect of television; observations on the effectiveness, the potentialities and the tasks of television programmes for young people/. München, Evangelischer Presse-Verband für Bayern, 1960. 294 p. (Schriftenreihe der Evangelischen Akademie für Rundfunk und Fernsehen, No. 9.)

An evaluation of German children and youth programmes on TV, based on a comparison of the reactions of 10 urban and 19 rural children (5-10 years) and of 10 rural and 10 urban adolescents (10-14 years), observations of 10 family heads, and reactions of variable groups totalling 350 youths.

With growing age the preference for television as compared with other media shifted to cinema and books. Fiction, semi-documentary programmes and youth-news were preferred to documentaries, discussions, demonstrations. Reflections on psychological, educational and moral functions of youth programmes.

119. Wolfe, Katherine M. and Fiske, Marjorie. Why they read the comics. In: Lazarsfeld, P.F. and Stanton, F.N. Communications research, 1948-1949. New York, Harper, 1949. p. 152-179.

For normal children, according to these authors, comic reading is a means of ego-strengthening, and therefore satisfies real developmental needs. For insecure, maladjusted children, however, the comics may become a substitute for what they do not find in life. Thus, for some, Superman becomes a father-figure. Thus the comics provide "an authority and power which settles the more difficult or ultimate issues, enables these children to perform their daily tasks without too much anxiety". If a child satisfies emotional needs with comics, however, he does not readily outgrow the need. Unlike the normal child, he does not learn to stand on his own feet. For the maladjusted child, "the religion of comics is not easily given up, for the child is frightened and no new religion beckons". The conclusions are based on detailed interviews with children of different ages.

120. Zazzo, Bianka and Zazzo, René. La jeunesse et le cinéma: étude expérimentale du Centre international de l'enfance effectuée au laboratoire de psychobiologie de l'enfance /Youth and the cinema: an experimental study carried out by the Centre international de l'enfance at the Laboratory for Child Psychobiology/, Courrier du Centre international de l'enfance, Vol. 8, No. 4, 1958. p. 185-197.

From the standpoint of television research, the most pertinent parts of this report deal with attempts to analyse affective reactions brought to the surface by exposure of 900 adolescents to a selected group of films. In brief, the finding was that films do bring out such reactions, and enter into the formation of children's attitudes toward their parents.

VI. EFFECTS OF VIOLENCE AND AGGRESSION

A. PSYCHOLOGICAL EFFECTS*

121. Albert, Robert S. The rôle of the mass media and the effect of aggressive film content upon children's aggressive responses and identification choices, Genetic Psychology Monographs, No. 55, 1957. p. 221-285.

The author showed three versions of a western film, similar to television westerns, to 220 children age eight to ten. In one version of the film, the hero won the conventional victory over the villain. In another version, the villain won, and was not punished. The third version ended before either hero or villain could win. Before and after the film, he measured the aggression level of the children. He found no evidence that either the film in which the hero won, or the one in which the villain won, decreased the aggression level in the children; on the other hand, it did not increase the aggression to any significant degree. Somewhat surprisingly, the version of the film in which the contest was not decided did significantly decrease the aggression level of the children who saw it. The effect was greater on younger children and children with low I.Q.'s.

122. Attitudes of children and parents toward violent scenes on TV, Monthly Bulletin of the Radio and Television Culture Research Institute, No. 2, 1961.

By means of questionnaires and programme analyser studies, reactions of 200 fifth- and eighth-grade children and their parents were sought with respect to a number of programmes. Five out of 22 examples of programmes contained violent scenes that parents felt they did not wish their children to see. The scenes that most concerned the parents contained acts of cruelty which they feared the child might imitate, or made use of weapons easily available. By studying the children, however, it was found that the majority were not greatly interested in the scenes that worried the parents. Both the children and the parents felt uncomfortable at the same scenes.

123. Bandura, Albert, and Huston, Aletha C. Identification as a process of incidental learning, Journal of Abnormal and Social Psychology, Vol. 63, No. 2, 1961. p. 311-318.

Two groups of pre-school children were put through contrasting experiences with the same adult model. In one case, the model behaved in a number of aggressive ways toward dolls; in the other, in a number of non-aggressive ways toward the same dolls. Later, when given an opportunity to play with the same dolls, the children in each group imitated the behaviour of the model. Furthermore, the children who had previously experienced more socially rewarding relationships with the model were most likely to imitate closely and at length. However, the part of the model's behaviour which was aggressive was readily imitated regardless of the relation of the children to the model. The implication is that children will readily imitate aggressive behaviour they see in the mass media.

124. Bandura, Albert, Ross, Dorothea, and Ross, Sheila. Imitation of film-mediated aggressive models, Journal of Abnormal and Social Psychology, Vol. 66, No. 1, 1963. p. 3-11.

This study was designed to find out whether children would be more likely to imitate aggressive behaviour seen in real life than similar behaviour seen on film or in cartoons. Groups of nursery schoolchildren were exposed to the same examples of behaviour; one group saw them in the experimental room, another on film, another by means of projected cartoons. A control group saw none of these. Afterward, the children were given opportunities to play with the same toys used in the demonstrations. Children who had seen the aggressive behaviour played significantly more aggressively than children who had not seen the demonstrations. Children who had seen the real-life aggressive models imitated the behaviour more closely than children who had seen the cartoon, but there was no difference in imitative behaviour between the children who had seen the live demonstration and those who had seen the film, nor did the three experimental groups differ significantly in total aggression. Indeed, the results suggest that "exposure to humans on film portraying aggression was the most influential in eliciting and shaping aggressive behaviour". The implication is that very young children at least are as likely to imitate aggression seen on television or in films, as aggression seen in real life.

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* For additional treatment, see the general studies in section II, especially 10, p. 169-220; 12, 139-41, and 161-66; 11, passim. In this section, film studies are not separated from television studies, because in most of them the stimulus was presented in such a way as to represent either film or television.

125. Bandura, Albert, Ross, Dorothea, and Ross, Sheila A. Transmission of aggression through imitation of aggressive models, Journal of Abnormal and Social Psychology, Vol. 63., No. 3, 1961. p. 575-582.

One group of children were shown an adult hitting and kicking a "bobo doll" - a large rounded doll which has weights in its feet so that it can be used as a sort of punching bag. A comparable group of children were shown adult non-aggressive behaviour. At a later time, the children were stimulated in such a way as to irritate them mildly and bring out aggression in them. Then they were taken into a room where there were a number of attractive toys, including the bobo doll. The children who had been shown the aggressive behaviour typically imitated it; they went to the bobo doll and began hitting and kicking it. The children who had not seen the aggressive behaviour did not do this, and displayed considerably less aggression generally. The implication is that when children see aggressive behaviour on television, they may imitate it when their own aggression is high and when the opportunity is at hand.

126. Berkowitz, Leonard. Violence in the mass media. In: Paris-Stanford studies in communication. Stanford, Ca., Institute for Communication Research, 1962. p. 16.

Reviews the pertinent research, including some recent work by the author. Concludes: "The present analysis obviously has important social implications. While it may be true that television, movies, and comic books will excite anti-social conduct from only a relatively small number of people, we can also say that the rather heavy dosage of violence in the media heightens the probability that someone in the audience will behave aggressively in a later situation. This might not be so bad if the observer indulging the fantasy aggression were the only person to suffer. He had chosen to expose himself to the influence of TV, movies, and comic books. Unfortunately, however, the observer instigated to carry out hostile acts usually injures an innocent bystander."

127. Berkowitz, Leonard and Rawlings, Edna. Effects of film violence on inhibitions against subsequent aggression, Journal of Abnormal and Social Psychology, Vol. 66, No. 3, 1963. p. 405-412.

This experiment was a test of whether seeing aggressive scenes in films or television programmes could "purge" a youth of aggressive inclinations. The design was rather complicated, and will not be described in detail here. Essentially comparable groups of college students were shown a film in which a prize-fighter was seen absorbing a brutal beating. Half the groups had been provoked and angered by an experimenter before seeing the film. Half of them were told that the prize-fighter who was being beaten was a "downright scoundrel". The question was whether the justification of this hostility would enable the students to get rid vicariously of their hostility toward the experimented. It did not. On the contrary, it increased the amount of overt hostility expressed toward the experimenter. The implication is that when aggressive behaviour is justified on film or television, it lowers children's inhibitions against expressing their own aggressions, and does not reduce those aggressions vicariously.

128. Brodbeck, A.J. The mass media as a socializing agency. A paper read to the American Psychological Association Symposium on Children and the Mass Media, San Francisco, 1955.

The author of this paper considers television viewing as a problem-solving activity for children. He believes that the effect of television programmes on children probably depends on the personality, the situation, and the particular problems of the children. He advises, therefore, against believing that a given kind of television will necessarily have a given kind of effect. For example, he reports that a cowboy film had considerable impact on younger children, but very little on older ones - who supposedly had become familiar with the typical "western" plots. He reports another case in which children's level of aggression rose greatly after reading a comic book story in which the villain got away with his dirty work; but these children's standards of right and wrong did not change at all. He suggests that "when aggression is really successful in fantasy, it tends to remove inhibitions of aggression in real life; when punished in fantasy, it tends to be inhibited in real life". Unfortunately the research to which he alludes in the paper has apparently never been published.

129. Emery, F.E. and Martin, David. Psychological effects of the "Western" film: a study in television viewing. Melbourne, Department of Audio-Visual Aids, University of Melbourne, 1957. 47 p. (Studies in Mass Communication).

The investigators showed Western films to small audiences of Australian children, and made various psychological measures, including the Rosenweig Picture Frustration Test, before and after the films were seen. The results did not confirm the Feshbach hypothesis that television or film fantasy releases pent-up aggression in viewers, and thus lowers their overall level of aggression. The investigators also came to the conclusion that children develop a perceptual defence to protect them against shock and anxiety experienced from violent films. Especially if they identify with a hero who wins out and seems more dynamic and effective after the action of the film, they seem to be able to avoid the stress and anxiety which might otherwise result from a violent film.

130. Evry, Hal. TV murder causes bad dreams, Film World, No. 8, 1952. p. 247.

More than half of 2,000 six-year-olds in private and parochial schools told teachers they dreamed about the television programmes they watched, and about a quarter of those who dreamed about the programmes said their dreams were bad. About 59 per cent of children with television in their homes said they were sometimes frightened by TV programmes.

131. Feshbach, S. The drive reducing function of fantasy behaviour, Journal of Abnormal and Social Psychology, Vol. 50, No. 1, 1955. p. 3-12.

Dr. Feshbach conducted an experiment in which half of a group of experimental subjects (college students) were deliberately insulted so as to rouse their feelings of aggression. Then half the insulted group and half the non-insulted group were shown pictures that encouraged them to express their feelings in fantasy. Thematic apperception test pictures were used for this purpose. The students who had been insulted and were then shown the fantasy pictures showed significantly less aggression than those insulted but not shown the fantasy pictures. The insult-fantasy group expressed significantly less aggression toward the experimenter who had insulted them, than did the insult-non-fantasy group. And the insult-fantasy group showed considerably more aggression in their responses to the pictures than did the non-insult-fantasy group. Dr. Feshbach made no claim that these results would necessarily apply in all cases to television viewing. But assuming that children's television viewing is fantasy behaviour, other readers have stated what has come to be called the "Feshbach hypothesis" - that the experience of viewing television helps children to reduce their level of aggression.

132. Heinrich, Karl. Filmerleben, Filmwirkung, Filmerzeihung - Der Einfluss des Films auf die Agressivität bei Jugendlichen, Experimentelle Untersuchungen und ihre lernpsychologischen Konsequenzen /Film experience, film effects, film education. The influence of film on aggressiveness of youth, experiments and consequences for the psychology of learning/. Berlin, Hannover, Darmstadt, H. Schroedel, 1961. 372 p.

Purpose: Study of direction and amount of change of aggressiveness as a result of film-exposure.

Subjects: 2,250 pupils of all types of school, in West Germany, between 12 and 16 years, exposed in 11 groups of about 150 in 1956-1957.

Methods: Before and after design measuring effects of three types of regular story films (aggression arousing, appeasing, ambivalent) by means of Thurstone scales.

Results: Films with dominant aggression themes enhance aggressive attitudes, if realistically and dynamically screened, and when they facilitate identification. Only one film, characterized by facilitated identification with harmonic and appeasing action, had appeasing effects. Films without significant effects in either direction lacked either identification clues or dominating aggression themes.

133. Lovaas, O.J. Effect of exposure to symbolic aggression on aggressive behaviour, Child Development, No. 32, 1961. p. 37-44.

This experimenter showed an animated cartoon, with much aggressive material, to one group of children, and a similar cartoon without much aggressive material to another group. Afterward he gave each child a choice between two toys to play with. One of these was an aggressive toy; by turning a lever the child could make one doll hit another on the head. The other toy had moving doll figures that did not hit one another. The children who had seen the aggressive picture tended to prefer the aggressive toy; the others, the non-aggressive toy. The implication is that viewing aggressive action in films or television programmes will tend in some degree to rouse children's aggressive impulses - it will not necessarily serve as a safety valve to relieve such impulses.

134. Maccoby, Eleanor E., Levin H., and Selya B.M. The effect of emotional arousal on the retention of aggressive and non-aggressive movie content, American Psychologist, No. 10, 1955. p. 359.

__________ The effects of emotional arousal on the retention of film content: a failure to replicate, Journal of Abnormal and Social Psychology, Vol. 53, No. 3, 1956. p. 373-374.

These two experiments were designed to test the hypothesis that children who are frustrated (and hence high in aggression) before seeing an adventure film, are more likely than non-frustrated children to remember the violent and aggressive content of the film. One group of children was frustrated in a spelling contest by being given words much too advanced and too hard for them, a control group was given easy words and therefore not so frustrated. Both groups of children were then shown a film with much violent content. In the first experiment, measures taken a week later (using children in the Boston area) showed that the children who had been frustrated did indeed remember more of the violent content of the film. When the experiment was replicated (using up-State New York children), no significant differences were found between experimental and control groups.

135. Parrot, Philippe, Spinat, P., Guitton, R. and Corbal, F. Une identification héroïque de l'adolescent délinquant: Eddie Constantine /A heroic personification of juvenile delinquency: Eddie Constantine/, Rééducation, No. 2, 1957. p. 23-33.

When 24 boys aged 16 to 18, under observation at the reception and observation centre at Macanan, were asked to write an essay on their favourite movie actor or actress a high proportion of them named Eddie Constantine. Their expressed reasons were that "he fights", "knows how to treat women", and "overcomes all obstacles". The authors analyse the apparently unconscious motives for this preference, and conclude that this type of film hero is especially dangerous for juvenile delinquents because he "respects no moral code and frequently plays an ambiguous rôle; one can never tell whether he is on the side of the police or on the side of the gangsters".

136. Preston, M.I. Children's reactions to movie horrors and radio crime, Journal of Pediatrics, No. 19, 1941. p. 147-168.

An emotional inventory was administered to 200 normal children, some of whom spent much more time than others on movie horror shows and radio crime programmes. Among the symptoms that increased with increasing attention to such programmes were nervousness, fears, sleeping disturbance, eating disturbances, nail-biting, daydreaming, and sex-interest. These symptoms increased in severity with the degree of addiction to these types of movies and radio programmes.

137. Rebeillard, Monique. Etat actuel de la recherche filmologique en neuro-psychiatrie infantile /Present state of filmological research in infantile neuro-psychiatry/. Paris, La Productrice, 1955. 45 p.

Finding that cinema attendance was high among a sample of juvenile delinquents, this researcher compared the reactions of normal and of maladadjusted children to various films. In general, it was found that movies stimulate intelligent and well-adjusted children, contribute to their vocabularies, and enrich their imaginations. Some children, however, are wearied and depressed by films, especially those in which they identify with unhappy heroes. Using electro-encephalograms as well as paper-and-pencil tests, the researcher concluded that young viewers project their own personal conflicts into the conflicts shown on the screen. The techniques, however, did not permit them to draw very specific conclusions from these results.

138. Riley, Matilda W. and Riley, John W., Jr. A sociological approach to communication research. In: Schramm, W. ed. The process and effects of mass communication. Urbana, Ill., University of Illinois Press, 1954. p. 389-401.

This study was based on a survey designed to ascertain the relation of peer group membership to television viewing. The subjects were 400 United States children. It was found that non-members of peer groups (children who had few friends) were more likely to view violent television programmes, "including Westerns, mysteries, crime, horror, and other such adventure themes". Among older children who are beyond the age when such programmes are usually highly popular, the children who still had most liking for such programmes were the ones who were most frustrated in wanting to belong to and be accepted by peer groups. The authors conclude: for non-members of the peer groups, such programmes "may form a fantasy world into which he may escape from a real world in which the standards seem impossibly high".

139. Scott, L.F. Social attitudes of children revealed by response to television programmes, California Journal of Elementary Education, No. 22, 1954. p. 176-179.

When 478 California schoolchildren filled out questionnaires on law enforcement, it was found that:

60 per cent thought it was all right to use dishonesty in law enforcement (as television sometimes did);

12 per cent thought real-life sheriffs today are dishonest (43 per cent thought television sheriffs are dishonest);

79 per cent thought law enforcement officials mistreat Western bad men on television;

33 per cent thought cowboys today carry guns as TV cowboys do.

140. Siegel, Alberta E. Film-mediated fantasy aggression and strength of aggressive drive, Child Development, No. 27, 1956. p. 365-378.

The main hypothesis for this study of 24 nursery schoolchildren was that aggression and guilt are lower in children after they see a film or television programme with much aggressive content. The results, however, indicated that aggression and guilt might be higher, rather than lower, after seeing such a film, but the differences were not statistically significant.

141. Siegel, Alberta E. The influence of violence in the mass media upon children's rôle expectations, Child Development, No. 29, 1958. p. 35-56.

Two groups of second-grade children (6 or 7 years old) were shown different versions of a film about a taxi driver. One group saw a version in which the taxi driver was shown as a very aggressive person; the other, a version in which the driver was not depicted as an aggressive person. When they completed a story about a taxi driver, at a later time, the group that had seen the aggressive driver in the film depicted a taxi driver as a more aggressive person than did the other group. The implication is that the kind of adults children see on television may lead them to expect to see such adults in real life; that is, if they become accustomed to violence among adults on television, they may expect considerable violence among real adults when they grow up.

142. Thomson, R.J. Television-Crime-Drama. Its impact on children and adolescents. Melbourne, F.W. Cheshire, 1959. 197 p.

This investigator showed two crime dramas to 48 intermediate (early teen-age) students in Melbourne, Australia. Photographs taken of the audience during the films indicated that tension built up in them during the showing. Projective reactions to pictures obtained from them afterward, however, did not indicate any significant rise in aggression or fear. Mr. Thomson suggested that his evidence might indicate "some sort of natural safeguard operating to protect the typical adolescent crime-drama audience from stress effects". He found no evidence "that viewing a crime film provoked any criminal or psychopathic tendencies in the great majority of viewers... If there is some risk to children viewing this type of programme constantly, it would appear to lie rather in the direction of the acquiring of certain relatively stereotyped and insensitivized reactions". The implication is that children who view much of this kind of programme might possibly also acquire an insensitivity and stereotyped reaction to violent events in real life.

143. Walters, R.H., Thomas, D.E., and Acker, C.W. Enhancement of punitive behaviour by audio-visual displays, Science, No. 136, 1962. p. 872-873.

Fourteen male hospital attendants in Toronto, Canada, watched the knife-fight scene in the motion picture Rebel Without a Cause. A control group of the same size watched a film showing adolescents engaged in constructive activities. After seeing the films the members of the two groups were assigned to run a conditioning experiment which gave them the opportunity to punish errors in the experimental subjects by administering electric shocks of variable intensities. The group which had watched the fight behaved in a much more punitive manner than did the other group, using a significantly higher level of current to give shocks. The implication, say the authors, is that "exposure to audio-visual displays containing aggressive content can result in significantly greater willingness to inflict pain".

144. Zajonc, Robert. Some effects of the 'space' serials, Public Opinion Quarterly, Vol. 18, No. 4, 1954. p. 367-374.

Two groups of children, 10-14 years old, listened to different versions of a radio space drama, in one of which the hero was a power-seeking character, in the other a friendship-seeking one. Each of the groups said overwhelmingly it would like to be like the successful character (whether he was power-oriented or affiliation-oriented). Furthermore, the children who heard the power-oriented hero also concluded that power was a more desirable attribute than did the children who heard the other hero. Although these effects may not be long lasting, still the implication is that children admire and copy behaviour they see in the media that "works".

B. RELATION TO DELINQUENCY AND CRIME

145. Blumer, Herbert and Hauser, Philip M. Movies, delinquency, and crime. New York, Macmillan, 1933. 233 p.

This Payne Fund study made use of film showings to, interviews with and essays by, a number of delinquent boys and girls and ex-convicts. The conclusion of the study is that it is probable that movies influence about 10 per cent of delinquent boys and 25 per cent of delinquent girls. This influence is usually unconscious; and indeed many more of these young people said they were influenced by films than could demonstrate any such relationship. As television researchers have also found, the mass media serve as convenient scapegoats to absorb the blame for criminal behaviour.

The types of films which are believed to enter most often into the making of delinquent behaviour in boys are those which show the behaviour of criminals, which arouse desires for wealth and power and show socially unacceptable ways of attaining these goals, which glorify toughness, arouse violent sexual desires, and commend careers like those of gangsters. In the case of girls, the films which are most likely to contribute to future delinquency are those which arouse sexual passions, stimulate desire for a life of luxury and gaiety and at the same time suggest undesirable ways of achieving those goals, incite them to flirtations and sexual experimenting, and occupy time in their lives which would be better devoted to home and school.

On the other hand, the investigators point out that films may have a favourable as well as an unfavourable influence in the lives of boys and girls. It depends on the film and the child.

146. Cressey, Paul G. and Thrasher, Frederick M. Boys, movies, and city streets. New York, Macmillan, 1933.

Studying 949 boys in New York City, these investigators found a correlation between frequent cinema attendance and delinquency. They pointed out, however, that their data do not enable them to say whether frequent movie-going leads to undesirable behaviour, or whether bad behaviour leads to movie-going. While it may be concluded that movies are not often solely responsible for delinquency, it is, on the other hand, unlikely that delinquents can go often to movies without being influenced by what they see on the screen.

147. An effect of TV on Children, TBS Research Information, No. 35, November 1961.

The National Association of Commercial Broadcasters in Japan has been surveying the effect of TV on children. The first two reports were published under the title of "An Effect of TV on Children" and "Potentially Misbehaving Children and TV".

In the former study, dwelling areas were classified as industrial, commercial, and residential, and from each type of area two junior high schools were selected. In addition to the six junior high schools, 17 parochial grammar schools were selected in the areas, from which 3,000 children were added to the 3,000 students selected from the six junior high schools, making a total of 6,000 children to be surveyed, together with children from the grammar schools. These students were divided into a control group and a TV group, and compared by an individual matching method.

As to TV's effect on children's interests, the control group displayed a tendency to be a little more interested than the TV group in such static behaviour as reading books on science, composing a poem, and so forth.

Although positive-negative tests were applied in order to conceptualize the relationship between viewing behaviour and positive or negative personalities, no significant differences were found. In physical activeness and social consciousness tests, findings for the former revealed no statistical difference, but findings for the latter revealed that children in a TV group were a little more individualistic and in favour of status quo, and the ones in the control group were a little less favourable to status quo and to meliorism.

148. Great Britain. Home Office. Report of the departmental committee on children and the cinema. London, H.M.S.O., 1950.

In this report of a committee set up in 1947 to investigate the effect of cinema-going on children, it is stated that out of 38,000 children under 16 who appeared before a juvenile court during a period of six months, only 141 cases of criminal behaviour and 112 cases of moral misbehaviour could be found in which there appeared to be a direct relationship with film attendance. The committee decided that criminal and amoral behaviour are the results of more subtle and complex influences than film-going.

149. Haines, William H. Juvenile delinquency and television, Journal of Social Therapy, No. 1, 1955. p. 192-198.

One hundred teen-age prisoners in Chicago jails were interviewed concerning their histories and their opinions as to whether television, movies, radio, and pornographic literature had anything to do with their criminal careers. Conclusion: "TV, pornography, and movies play a distinct rôle in the creation of anti-social behaviour in susceptible teen-agers".

150. Japan. League of Non-Governmental Broadcasters. Effects of television on juveniles, Shimbun Kenkyu, No. 116, 1961. p. 17-24.

A questionnaire survey of 461 delinquents, 14 to 26 years old, in Osaka, found that fewer blamed television as a cause for their delinquency than blamed movies or magazines.

Another questionnaire survey of 1,119 junior high school students and potential delinquents in a special school in Osaka found that the potential delinquents had no stronger preference than the other children for crime-thriller programmes.

151. Logan, C.S. What our children see, Yearbook of the Institute for Education by Radio, 1950. p. 170-174.

When 314 pediatricians, sociologists, neuropsychiatrists, and psychologists were given a series of questions on the effects of television on children, 90 per cent of them expressed the belief that crime programmes have in some ways a harmful effect. About 81 per cent said they thought television crime programmes contributed to children's delinquency or asocial behaviour.

152. Potentially misbehaving children and TV, Asahi Hoso, March 1961.

Potentially misbehaving children and potentially well-behaved children to be compared were selected on the basis of a number of tests: an IQ test, whether orphans or not, school grades, groups belonged to, a personality test by the Dr. Ushizima method, and a self-control test. A total of 1,000 children in the second year in six junior high schools, some of whom were juvenile delinquents, were surveyed.

The survey investigated the time they spent in viewing, their selection of programmes, viewing behaviour, and preference in regard to programmes.

Findings as to time and selection of programmes did not show significant differences between the two groups. Potentially misbehaving children tended to select comic programmes a little more often, and action and thriller programmes without complex stories, relatively stimulating as these programmes were. On the other hand, potentially well-behaved children tended to select educational programmes a little more frequently, and a considerable number of complex and intellectual action and thriller programmes.

As the result of an IQ and a school grade test, interrelated with time, children with both extremely high school grades and a high IQ tended to have a longer viewing time than other children. Children with low school grades and with low IQ tended to have short viewing times. Among other children, the higher the IQ, the longer the viewing time. Among children of equal IQ, the higher their grades, the less likely were they to spend a long time on TV.

C. STUDIES OF VIOLENT CONTENT[*]

153. Dale, Edgar. *The content of motion pictures*. New York, Macmillan, 1935. 234 p.

This Payne Fund study of the content of 500 feature films from each of the years 1920, 1925, and 1930 makes interesting comparison with the content of television as seen by children today. In those years, love, crime, and sex were the main themes of 72 per cent of the feature films examined. Only one out of 500 films was a children's film. Children who visited the theatre once a week saw an average of one crime film per month. Of 115 crime films shown in cinemas in Columbus, Ohio, murder techniques were shown in nearly every film, attempted murder in 21, and actual murder in 45. Extramarital relations, seduction, adultery, procuring, illegitimacy, prostitution were commonly shown in films which dealt with sex themes.

154. Jones, Dorothy B. Quantitative analysis of motion picture content, *Public Opinion Quarterly*, Vol. 6, No. 3, 1942. p. 411-428.

This study of 100 grade A and grade B films distributed in the United States in 1941 and 1942 is interesting to television scholars for the comparisons it makes possible with the present content of television. In these 100 films, 80 per cent of the leading characters were middle class, and nearly half were wealthy. Two out of five were Americans and seven out of ten unmarried. The main behaviour motives in the films were love (68 per cent), fame or prestige (26 per cent), security and health (16 per cent), and money (10 per cent). The figures just given add to more than 100 per cent because some characters had more than one motive.

155. Mirams, Gordon. Drop that gun [Bas les armes], *Quarterly of Film, Radio, and Television*, Vol. 6, No. 1, 1951. p. 1-19.

This is a study of crime and violence in 100 feature films. An average of 6.6 acts of crime or violence was found per film. Among the crimes were 168 murders or attempted murders, of which 73 took place in 13 Westerns.

156. Whalen, Ray. *Crime and violence on television*. Ottawa, Canadian Broadcasting Corporation, 1959.

Content analysis finds that two United States networks devoted nine-and-one-half hours weekly to programmes containing crime and violence as defined in Webster's New World Dictionary. The third U.S. network carried six-and-one-half hours of such programmes, and Canadian Broadcasting Corporation carried five-and-one-half hours. However, since CBC is on the air fewer hours than the U.S. networks, its percentage was proportionately higher.

The study notes that despite the coming of television with this amount of violence, the number of juvenile crimes in Canada has decreased since 1942.

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[*] See also 10, p. 179-191, and 12, p. 139-141, for analyses of violent content in British and American television.

VII. EFFECTS ON MALADJUSTED AND DISTURBED CHILDREN

A. TELEVISION

157. Freedman, Lawrence A. Daydream in a vacuum tube: a psychiatrist's comment on the effects of television. In: Schramm, W., Lyle, J., and Parker, Edwin B. Television in the lives of our children. Stanford, Ca., Stanford University Press, 1961. p. 189-194.

Basing his comments on clinical experience, the author analyses some of the complex interrelationships between television and a child's behaviour. He says that when a child spends far more than average time viewing television it is reasonable to suppose that this behaviour is symptomatic of intolerable stress in his environment or of brewing anxiety and instability within him. Most children, he says, do not confuse the "pretend" world of television with the real world. However, some do. The author then outlines a continuum of such responses in terms of the probable mental health of the child. The schizoid, who avoids intimate relationships and tries to live within himself, finds in television a retreat from the unbearable stresses of relationships he wants to avoid. Children with hysterical or dissociative tendencies may identify too easily with television characters and assume their habits and their fantasy adventures. Psychopathic children whose self-governing and self-censoring mechanisms are defective and whose identifications with meaningful adult figures have been seriously impaired, are poised to rebel and may find the television criminal a model for their rebellion. Psychotic children, confused in their identifications and distressed by the violence of their own impulses, may find the necessary stimulus to violence in the violence of television, or they may retreat into it, or may follow exactly and literally the recommendations they hear on television. This is at the opposite end of the continuum from the mentally healthy child.

158. Glynn, Eugene David. Television and the American character - a psychiatrist looks at television. In: Elliott, William Y. Television's impact on American culture. East Lansing, Mich., Michigan State University Press, 1956. p. 175-182.

Looking at television from the viewpoint of his experience as a psychiatrist, Dr. Glynn holds forth some gloomy possibilities. The chief effect of the medium, he feels, is "passivity and dependence, in multiple shapes and forms". He feels that aggression probably "is not so much inhibited by television as displaced". He wonders what will be the effect on children of being so constantly stimulated throughout their early years by television fantasy. "Will reality match up to the television fantasy this generation has been nursed on?" he asks. "These children are in a peculiar position; experience is exhausted in advance... When the experience itself comes, it is watered down, for it has already been half lived, but never truly felt."

B. RELATED STUDIES OF FILM

159. Brini, A. and Redslob, E. Les méfaits de la symphonie pastorale [Harmful effects of the film "La Symphonie pastorale"]. Annales d'occulistique, No. 106, 1947. p. 104-106.

This is the case-history of a girl of 14 who became temporarily blind after seeing a film "La Symphonie pastorale". The diagnosis was hysteria.

160. Bruel, Oluf. Psychic trauma through the cinema: an illustrative case. International Journal of Sexology, No. 7, 1953. p. 61-63.

A 15-year-old girl developed a phobia that inhibited her from entering a watchmaker's shop where she had recently left her father's timepiece to be repaired. The clinician traced the origin of the phobia to the viewing of the film, "The Hunchback of Notre-Dame", which had apparently had a traumatic effect on the girl. The film was believed to have aroused masochistic tendencies, which were condemned and inhibited. The struggle between active and inhibitory forces developed into the neurosis which brought her to the therapist for treatment.

VIII. PHYSICAL EFFECTS*

161. Henshaw, S., Miller, V.L., and Marquis, D. Children's sleep [Le sommeil des enfants]. New York, Macmillan, 1933.

This Payne Fund study was based on a recording of the movements during sleep of 163 children, ranging from 6 to 19 years of age, who were shown a movie between 6:30 and 8:30 p.m., and then went to bed at 9 p.m. The amount of movement increased as much as 90 per cent in some children on the night after seeing the movie, and the effect sometimes persisted for several nights thereafter. With some children the sleep-disturbing effect of some films was equal to that of drinking two cups of coffee at bedtime. Great individual differences were found among children in the amount of disturbance a film could cause in their sleep, and some films proved more disturbing than others.

162. Müller, Hans Peter. Veber die Wirkung des Fernsehens auf Kindle [on the effect of television upon children]. Internship report at the Institute for Psychology, Karl Marx University, Berlin.

Forty-three children, aged 7 through 11, from a day nursery school were tested in three ways to determine whether their fatigue resulting from 90 minutes of watching television was any different from fatigue resulting from the same time spent watching still pictures. Exposure to the two kinds of pictures took place on alternate days. Before and after exposure, the children were tested on their ability to correlate familiar symbols with numbers shown to them; on their ability to perform a motor skill test with a steady hand; and on their "blur and flicker thresholds". The first two tests revealed no statistically significant differences, but the third indicated that watching television is more fatiguing than looking at photographs.

163. On how to view TV, Annual Bulletin of the Radio and Television Culture Research Institute, No. 11, 1959.

The opthalmology department of the Keio University medical school (Tokyo) studied the effect of television viewing on the eyes. Their finding was that two hours of television viewing under unfavourable conditions can temporarily reduce the ability of the eye to focus and adjust, but that the eye recovers after 30 minutes to one hour's rest, and that the effect can be moderated very greatly by viewing under favourable conditions.

164. Television and the eyes, Vision, No. 6, 1952. p. 9-11.

Concludes there is no evidence that television viewed properly, harms children's eyes.

165. Zenczewski. Les conditions de la bonne réception du programme de la télévision [Conditions for good reception of television programmes], Rodzina i Szkola, [Family and School] No. 11, 1959. p. 7.

It is recommended that the child should be seated directly in front of the screen at a distance six or seven times the width of the screen. The middle of the screen should be at eye level, or slightly higher. No other light should fall on the screen. The receiver should be well adjusted. Children should not eat while watching television. And it is not recommended that the child be put to bed until at least 15 minutes after the end of the programme he has just seen.

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* For comparable treatments of television's effect on a child's sleep, see the General Studies in Section B.

PERIODICALS MENTIONED IN THE BIBLIOGRAPHY

American Journal of Sociology. University of Chicago, Chicago.
American Psychologist. American Psychological Association, Washington, D.C.
Annales d'oculistique. Gaston Doin et Cie, Paris.
Annals of Educational Research. The Chugoku-Shikoku Society for the Study of Education, Tokyo.
Annual Bulletin of the Radio and Television Culture Research Institute. Nippon Hoso Kyokai, Tokyo.
Asahi Hoso. Asahi Broadcasting Co., Osaka.
Bianco e Nero. Edizioni dell'Ateneo, Roma.
Bolletino Doxa. Milano.
Biuletyn Telewizyjny. Polskie Radio e Telewizja, Warsawa.
Cahiers d'études de radio-télévision. Radiodiffusion-télévision française, Paris.
California Journal of Elementary Education. California State Department of Education, Sacramento, California.
Child Development. Society for Research in Child Development, Lafayette, Indiana.
Courrier du Centre international de l'enfance, Paris.
Discovery. Mercury House, London.
L'école des parents. Ecole des parents et des éducateurs, Paris.
Educational Screen and Audio-Visual Guide. University Microfilms, Chicago.
Elementary English. National Council of Teachers of English, Champaign, Illinois.
Enfance. Paris.
Film Bild Ton. Institut für Film und Bild in Wissenschaft und Unterricht, Seebruck am Chiemsee.
Film World. Sidale Publishing Company, Los Angeles, California.
Genetic Psychology Monographs. The Journal Press, Provincetown, Massachusetts.
International Journal of Sexology. A.P. Pillay, Bombay.
Journal of Abnormal and Social Psychology. American Psychological Association, Washington, D.C.
Journal of Broadcasting. Association for Professional Education in Broadcasting, Los Angeles, California.
Journal of Educational Research. Denbar Publications, Madison, Wisconsin.
Journal of Pediatrics. C.V. Mosby Co., St. Louis, Missouri.
Journal of Personality. Duke University Press, Durham, North Carolina.
Journal of Social Therapy. Medical Correctional Association, New York.
Journalism Quarterly. School of Journalism, University of Minnesota, Minneapolis, Minnesota.
Jugend Film Fernsehen. Wissenschaftlichen Institut für Jugendfilmfragen, München.
Jugend und Film. München.
Monthly Bulletin of the Radio and Television Culture Research Institute. Nippon Hoso Kyokai, Tokyo.
National Parent Teacher (now PTA Magazine). National Congress of Parents and Teachers, Chicago.
Nowa Kultura. Polish Writers Union, Warsawa.
Phi Delta Kappan. Phi Delta Kappa, Bloomington, Indiana.
Polityka. 'Prasa', Warsawa.
Psychological Monographs. American Psychological Association, Washington, D.C.
Public Opinion Quarterly. Princeton University, Princeton, New Jersey.
Quarterly of Film, Radio, and Television. University of California Press, Berkeley, California.
Radio-TV Education. Nippon Hoso Kyokai, Tokyo.
Rééducation; Revue française de l'enfance délinquante, déficiente et en danger moral, Paris.
Revue internationale de filmologie. Institut de filmologie de l'Université de Paris, Paris.
Rodzina i Szkola. Ministry of Education, Warsawa.
La sauvegarde de l'enfance. Union nationale des associations régionales pour la sauvegarde de l'enfance et de l'adolescence, Paris.
Science. American Association for the Advancement of Science, Washington, D.C.
School Life. U.S. Office of Education, Washington, D.C.
Shimbun Kenkyu. Tokyo.
Social Forces. University of North Carolina Press, Chapel Hill, North Carolina.
Sociological Review. University College of North Staffordshire, Staffordshire, England.
Studies in Public Communication. University of Chicago, Chicago.
Study Report of the Humanities Department of Kagawa University, Takamatsu.
Times Educational Supplement. Times Publishing Company Ltd., London.
Vision. B.H. Barlow, New York.
Wies Wspolczesna, United Peasant Party, Warsawa.
Yearbook of the Institute for Education by Radio. Columbus, Ohio.

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